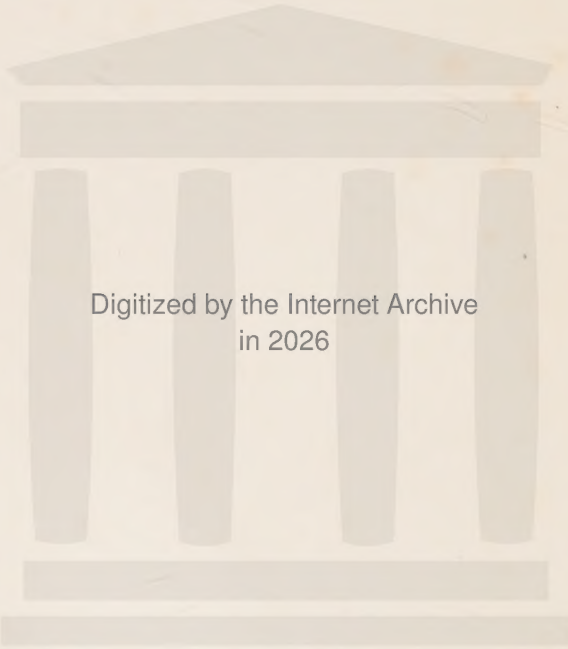




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NOVELS BY JULES VERNE

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Selected and Edited
by
H. C. HARWOOD

NOVELS BY JULES VERNE

being the following Five Books, reprinted
unabridged and included in one volume:

TWENTY THOUSAND LEAGUES UNDER
THE SEA
AROUND THE WORLD IN EIGHTY DAYS
FLOATING ISLAND
THE BLOCKADE RUNNERS
HECTOR SERVADAC

VICTOR GOLLANCZ LTD
14 Henrietta Street Covent Garden

1929

Messrs. Sampson Low, Marston & Co. Ltd. (by arrangement with whom this volume is issued) publish the following works by Jules Verne :

Abandoned	A Floating City, and Blockade Runners
Adrift in the Pacific	
Around the World in Eighty Days	Three Englishmen and Three Russians
The Clipper of the Clouds	Five Weeks in a Balloon
The Cryptogram	Tribulations of a Chinaman
Dick Sands	Twenty Thousand Leagues Under the Sea
Dropped from the Clouds	Vanished Diamond
End of Nana Sahib	Secret of the Island
Flight to France	Winter Amid the Ice
Floating Island	Their Island Home
Fur Country	Castaways of the Flag
Hector Servadac	The Lighthouse at the End of the World
Master of the World	The Mystery of the Franklin
Michael Strogoff	Tigers and Traitors
From Earth to Moon and a Trip Round It	Burbank, the Northerner
Godfrey Morgan	Texar, the Southerner
Eight Hundred Leagues on the Amazon	Child of the Cavern.

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INTRODUCTORY NOTE

This book is primarily intended for the use of uncles. Henceforth no uncle will be properly equipped unless he has bought six copies, one for himself and five for his nephews, godsons, etc. Realising, however, that this is an age of sex equality the enterprising publishers at enormous trouble and expense have arranged that copies shall be available for aunts and nieces, too. In fact nearly everyone will be able to buy this book. Whether this innovation, which is provoking a lot of talk in the trade, will be successful is not for me to say. The good Vernist is not too keen on seeing the stuff shied about everywhere. Personally I should have preferred to see a limited edition on Japanese vellum for subscribers, and ex-subscribers, to the "B.O.P." But democracy, feminism everywhere prevail. They are taking even our Verne.

Jules Verne must have grown into his teens before he was astonished by the sight of that quaint old thing, a railway train, and in the world to which he was born one man best communicated with another by putting a lad on a horse and giving him gold to ride quickly through muddy lanes. One marvels therefore that he could imagine an aerostat capable of 120 miles an hour, or of a steam car rolling along the open roads as easily as if upon rails. Here invention has outrun imagination, and prophecy loses interest by reason of its success. But not everywhere have we, clever as we are, managed to catch up with Verne, nor where we have done this—to our lasting credit—need we find the dreamer quite too terribly to date.

Some explanation must be given to fellow Vernists of this selection. No anthologist is ever popular, and I can only plead in excuse of my errors that they are made in cold blood. *From the Earth to the Moon* and its sequels, well known as they are, I thought on re-reading too slow in movement and too mathematical in detail. *The Clipper of the Clouds* is a much more vivid tale, but now that flying is a commonplace of transport may have lost its kick; and anyhow Robur is an ass. So much for the more glaring omissions. On the other hand I have picked *The Blockade Runners* as a sample of the non-scientific style, the

INTRODUCTORY NOTE

hairbreadth escape style in which, by the way, Verne most frequently wrote. No excuse need be made for the appearance of those old favourites, *Around the World* and *Twenty Thousand Leagues*. Not everyone knows, regarding the latter, that Captain Nemo was an Indian Prince with a grudge against empires. His life history may be found by the curious in the later volumes of *The Mysterious Island*, too desultory a work to be included here. *Floating Island*, which has nothing to do with the mysterious one, is a brilliant and ironic fantasy. Electric trams and dangling cables would have to be replaced by automobiles and wireless ; that done, American millionaires may yet be inspired to make it come true. (Tennessee Catholic ? Well ! Jules nodded.) And *Hector Servadac*, less famous than the others, is certainly not the least rich in gaiety, irony and imagination.

Since I have recently hustled through the work of Verne, have seen him at his worst as well as at his best, have revived old acquaintances and made new ones, perhaps I may be permitted to poach on the critics' preserves. Verne was not a good stylist, and he frequently padded with useful knowledge an otherwise straightforward story. In describing his people he was more often the caricaturist than the portraitist. His ideas were less numerous than his books. He was not a Swift nor a Mr. Wells. But he fully exploited his astonishing ideas. His stuff has to be compared with the cleverest detective stories, and in that comparison comes out splendidly. With firm logic that his fun and didacticism only ornament he hunts the hare to its form, and when he writes, as so often he does, of islands, has the map of them clear in his mind—machinery, too—stunts. Yes, stunts. He was the biggest stuntist of Western Europe. Meet M. Verne. Oh ! you know him ? Meet him again.

H. C. HARWOOD.

TWENTY THOUSAND LEAGUES
UNDER THE SEA



TWENTY THOUSAND LEAGUES UNDER THE SEA

PART ONE

CHAPTER I

A SHIFTING REEF

The year 1866 was signalised by a remarkable incident, a mysterious and puzzling phenomenon, which doubtless no one has yet forgotten. Not to mention rumours which agitated the maritime population and excited the public mind, even in the interior of continents, seafaring men were particularly excited. Merchants, common sailors, captains of vessels, skippers, both of Europe and America, naval officers of all countries, and the Governments of several States on the two continents, were deeply interested in the matter.

For some time past vessels had been met by “an enormous thing,” a long object, spindle-shaped, occasionally phosphorescent, and infinitely larger and more rapid in its movements than a whale.

The facts relating to this apparition (entered in various log-books) agreed in most respects as to the shape of the object or creature in question, the untiring rapidity of its movements, its surprising power of locomotion, and the peculiar life with which it seemed endowed. If it was a whale, it surpassed in size all those hitherto classified in science. Taking into consideration the mean of observations made at divers times—rejecting the timid estimate of those who assigned to this object a length of two hundred feet, equally with the exaggerated opinions which set it down as a mile in width and three in length—we might fairly conclude that this mysterious being surpassed greatly all dimensions admitted by the learned ones of the day, if it existed at all. And that it *did* exist was an undeniable fact ;

and, with that tendency which disposes the human mind in favour of the marvellous, we can understand the excitement produced in the entire world by this supernatural apparition. As to classing it in the list of fables, the idea was out of the question.

On the 20th of July, 1866, the steamer *Governor Higginson*, of the Calcutta and Burnach Steam Navigation Company, had met this moving mass five miles off the east coast of Australia. Captain Baker thought at first that he was in the presence of an unknown sandbank ; he even prepared to determine its exact position when two columns of water, projected by the mysterious object, shot with a hissing noise a hundred and fifty feet up into the air. Now, unless the sandbank had been submitted to the intermittent eruption of a geyser, the *Governor Higginson* had to do neither more nor less than with an aquatic mammal, unknown till then, which threw up from its blow-holes columns of water mixed with air and vapour.

Similar facts were observed on the 23rd of July in the same year, in the Pacific Ocean, by the *Columbus*, of the West India and Pacific Steam Navigation Company. But this extraordinary creature could transport itself from one place to another with surprising velocity ; as, in an interval of three days, the *Governor Higginson* and the *Columbus* had observed it at two different points of the chart, separated by a distance of more than seven hundred nautical leagues.

Fifteen days later, two thousand miles farther off, the *Helvetia*, of the Compagnie-Nationale, and the *Shannon*, of the Royal Mail Steamship Company, sailing to windward in that portion of the Atlantic lying between the United States and Europe, respectively signalled the monster to each other in $42^{\circ} 15' \text{ N. lat.}$ and $60^{\circ} 35' \text{ W. long.}$ In these simultaneous observations they thought themselves justified in estimating the minimum length of the mammal at more than three hundred and fifty feet, as the *Shannon* and *Helvetia* were of smaller dimensions than it, though they measured three hundred feet over all.

Now the largest whales, those which frequent those parts of the sea round the Aleutian, Kulammak, and Ungullich islands, have never exceeded the length of sixty yards, if they attain that.

In every place of great resort the monster was the fashion. They sang of it in the cafés, ridiculed it in the papers, and represented it on the stage. All kinds of stories were circulated regarding it. There appeared in the papers caricatures of every gigantic and imaginary creature, from the white whale, the terrible "Moby Dick" of sub-arctic regions, to the immense kraken, whose tentacles could entangle a ship of five hundred tons and hurry it into the abyss of the ocean. The legends of ancient times were even revived.

Then burst forth the unending argument between the believers and the unbelievers in the societies of the wise and the scientific journals. "The question of the monster" inflamed all minds. Editors of scientific journals, quarrelling with believers in the supernatural, spilled seas of ink during this memorable campaign, some even drawing blood; for from the sea-serpent they came to direct personalities.

During the first months of the year 1867 the question seemed buried, never to revive, when new facts were brought before the public. It was then no longer a scientific problem to be solved, but a real danger seriously to be avoided. The question took quite another shape. The monster became a small island, a rock, a reef, but a reef of indefinite and shifting proportions.

On the 5th of March, 1867, the *Moravian*, of the Montreal Ocean Company, finding herself during the night in $27^{\circ} 30'$ lat. and $72^{\circ} 15'$ long., struck on her starboard quarter a rock, marked in no chart for that part of the sea. Under the combined efforts of the wind and its four hundred horsepower, it was going at the rate of thirteen knots. Had it not been for the superior strength of the hull of the *Moravian*, she would have been broken by the shock and gone down with the 237 passengers she was bringing home from Canada.

The accident happened about five o'clock in the morning,

as the day was breaking. The officers of the quarter-deck hurried to the after-part of the vessel. They examined the sea with the most careful attention. They saw nothing but a strong eddy about three cables' length distant, as if the surface had been violently agitated. The bearings of the place were taken exactly, and the *Moravian* continued its route without apparent damage. Had it struck on a submerged rock, or on an enormous wreck ? They could not tell ; but, on examination of the ship's bottom when undergoing repairs, it was found that part of her keel was broken.

This fact, so grave in itself, might perhaps have been forgotten like many others if, three weeks after, it had not been re-enacted under similar circumstances. But, thanks to the nationality of the victim of the shock, thanks to the reputation of the company to which the vessel belonged, the circumstance became extensively circulated.

The 13th of April, 1867, the sea being beautiful, the breeze favourable, the *Scotia*, of the Cunard Company's line, found herself in $15^{\circ} 12'$ long. and $45^{\circ} 37'$ lat. She was going at the speed of thirteen knots and a half.

At seventeen minutes past four in the afternoon, whilst the passengers were assembled at lunch in the great saloon, a slight shock was felt on the hull of the *Scotia*, on her quarter, a little aft of the port-paddle.

The *Scotia* had not struck, but she had been struck, and seemingly by something rather sharp and penetrating than blunt. The shock had been so slight that no one had been alarmed, had it not been for the shouts of the carpenter's watch, who rushed on to the bridge, exclaiming, " We are sinking ! we are sinking ! " At first the passengers were much frightened, but Captain Anderson hastened to reassure them. The danger could not be imminent. The *Scotia*, divided into seven compartments by strong partitions, could brave with impunity any leak. Captain Anderson went down immediately into the hold. He found that the sea was pouring into the fifth compartment ; and the rapidity of the influx proved that the force of the water was

considerable. Fortunately this compartment did not hold the boilers, or the fires would have been immediately extinguished. Captain Anderson ordered the engines to be stopped at once, and one of the men went down to ascertain the extent of the injury. Some minutes afterwards they discovered the existence of a large hole, two yards in diameter, in the ship's bottom. Such a leak could not be stopped ; and the *Scotia*, her paddles half submerged, was obliged to continue her course. She was then three hundred miles from Cape Clear, and, after three days' delay, which caused great uneasiness in Liverpool, she entered the basin of the company.

The engineers visited the *Scotia*, which was put in dry dock. They could scarcely believe it possible ; at two yards and a half below water-mark was a regular rent, in the form of an isosceles triangle. The broken place in the iron plates was so perfectly defined that it could not have been more neatly done by a punch. It was clear, then, that the instrument producing the perforation was not of a common stamp and, after having been driven with prodigious strength, and piercing an iron plate $1\frac{3}{8}$ inches thick, had withdrawn itself by a backward motion.

Such was the last fact, which resulted in exciting once more the torrent of public opinion. From this moment all unlucky casualties which could not be otherwise accounted for were put down to the monster.

Upon this imaginary creature rested the responsibility of all these shipwrecks, which unfortunately were considerable ; for of three thousand ships whose loss was annually recorded at Lloyd's, the number of sailing and steam-ships supposed to be totally lost, from the absence of all news, amounted to not less than two hundred !

Now, it was the " monster " who, justly or unjustly, was accused of their disappearance, and, thanks to it, communication between the different continents became more and more dangerous. The public demanded sharply that the seas should at any price be relieved from this formidable cetacean.¹

¹ Member of the whale family.

CHAPTER II

PRO AND CON

At the period when these events took place, I had just returned from a scientific research in the disagreeable territory of Nebraska, in the United States. In virtue of my office as Assistant Professor in the Museum of Natural History in Paris, the French Government had attached me to that expedition. After six months in Nebraska, I arrived in New York towards the end of March, laden with a precious collection. My departure for France was fixed for the first days in May. Meanwhile I was occupying myself in classifying my mineralogical, botanical, and zoological riches, when the accident happened to the *Scotia*.

I was perfectly up in the subject which was the question of the day. How could I be otherwise? I had read and re-read all the American and European papers without being any nearer a conclusion. This mystery puzzled me. Under the impossibility of forming an opinion, I jumped from one extreme to the other. That there really was something could not be doubted, and the incredulous were invited to put their finger on the wound of the *Scotia*.

On my arrival at New York the question was at its height. The theory of the floating island, and the unapproachable sandbank, supported by minds little competent to form a judgment, was abandoned. And, indeed, unless this shoal had a machine in its stomach, how could it change its position with such astonishing rapidity?

From the same cause, the idea of a floating hull of an enormous wreck was given up.

There remained, then, only two possible solutions of the question, which created two distinct parties: on one side, those who were for a monster of colossal strength; on the other, those who were for a submarine vessel of enormous motive power.

But this last theory, plausible as it was, could not stand

against inquiries made in both worlds. That a private gentleman should have such a machine at his command was not likely. Where, when, and how was it built? and how could its construction have been kept secret? Certainly a Government might possess such a destructive machine. And in these disastrous times, when the ingenuity of man has multiplied the power of weapons of war, it was possible that, without the knowledge of others, a State might try to work such a formidable engine.

But the idea of a war machine fell before the declaration of Governments. As public interest was in question, and transatlantic communications suffered, their veracity could not be doubted. But how admit that the construction of this submarine boat had escaped the public eye? For a private gentleman to keep the secret under such circumstances would be very difficult, and for a State whose every act is persistently watched by powerful rivals, certainly impossible.

Upon my arrival in New York several persons did me the honour of consulting me on the phenomenon in question. I had published in France a work in quarto, in two volumes, entitled *Mysteries of the Great Submarine Grounds*. This book, highly approved of in the learned world, gained for me a special reputation in this rather obscure branch of Natural History. My advice was asked. As long as I could deny the reality of the fact, I confined myself to a decided negative. But soon, finding myself driven into a corner, I was obliged to explain myself point by point. I discussed the question in all its forms, politically and scientifically; and I give here an extract from a carefully-studied article which I published in the number of the 30th of April. It ran as follows:

“After examining one by one the different theories, rejecting all other suggestions, it becomes necessary to admit the existence of a marine animal of enormous power.

“The great depths of the ocean are entirely unknown to us. Soundings cannot reach them. What passes in those

remote depths—what beings live, or can live, twelve or fifteen miles beneath the surface of the waters—what is the organisation of these animals, we can scarcely conjecture. However, the solution of the problem submitted to me may modify the form of the dilemma. Either we do know all the varieties of beings which people our planet, or we do not. If we do *not* know them all—if Nature has still secrets in the deeps for us, nothing is more conformable to reason than to admit the existence of fishes, or cetaceans of other kinds, or even of new species, of an organisation formed to inhabit the strata inaccessible to soundings, and which an accident of some sort has brought at long intervals to the upper level of the ocean.

“ If, on the contrary, we *do* know all living kinds, we must necessarily seek for the animal in question amongst those marine beings already classed ; and, in that case, I should be disposed to admit the existence of a gigantic narwhal.

“ The common narwhal, or unicorn of the sea, often attains a length of sixty feet. Increase its size fivefold or tenfold, give it strength proportionate to its size, lengthen its destructive weapons, and you obtain the animal required. It will have the proportions determined by the officers of the *Shannon*, the instrument required by the perforation of the *Scotia*, and the power necessary to pierce the hull of the steamer.

“ Indeed, the narwhal is armed with a sort of ivory sword, a halberd, according to the expression of certain naturalists. The principal tusk has the hardness of steel. Some of these tusks have been found buried in the bodies of whales, which the unicorn always attacks with success. Others have been drawn out, not without trouble, from the bottoms of ships, which they had pierced through and through, as a gimlet pierces a barrel. The Museum of the Faculty of Medicine of Paris possesses one of these defensive weapons, two yards and a quarter in length, and fifteen inches in diameter at the base.

“ Very well ! suppose this weapon to be six times stronger

and the animal ten times more powerful ; launch it at the rate of twenty miles an hour, and you obtain a shock capable of producing the catastrophe required. Until further information, therefore, I shall maintain it to be a sea-unicorn of colossal dimensions, armed not with a halberd, but with a real spur, as the armoured frigates, or the 'rams' of war, whose massiveness and motive power it would possess at the same time. Thus may this puzzling phenomenon be explained, unless there be something over and above all that one has ever conjectured, seen, perceived, or experienced ; which is just within the bounds of possibility."

These last words were cowardly on my part ; but, up to a certain point, I wished to shelter my dignity as professor, and not give too much cause for laughter to the Americans, who laugh well when they do laugh. I reserved for myself a way of escape. In effect, however, I admitted the existence of the "monster." My article was warmly discussed, which procured it a high reputation. It rallied round it a certain number of partisans. The solution it proposed gave, at least, full liberty to the imagination. The human mind delights in grand conceptions of supernatural beings. And the sea is precisely their best vehicle, the only medium through which these giants (against which terrestrial animals, such as elephants or rhinoceroses, are as nothing) can be produced or developed.

The industrial and commercial papers treated the question chiefly from this point of view. The *Shipping and Mercantile Gazette*, the *Lloyd's List*, the *Packet-Boat*, and the *Maritime and Colonial Review*, all papers devoted to insurance companies which threatened to raise their rates of premium, were unanimous on this point. Public opinion had been pronounced. The United States were the first in the field ; and in New York they made preparations for an expedition destined to pursue this narwhal. A frigate of great speed, the *Abraham Lincoln*, was put in commission as soon as possible. The arsenals were opened to Commander Farragut, who hastened the arming of his frigate ; but, as it always

happens, the moment it was decided to pursue the monster, the monster did not appear. For two months no one heard it spoken of. No ship met with it. It seemed as if this unicorn knew of the plots weaving around it. It had been so much talked of, even through the Atlantic cable, that jesters pretended that this slender fly had stopped a telegram on its passage and was making the most of it.

So when the frigate had been armed for a long campaign, and provided with formidable fishing apparatus, no one could tell what course to pursue. Impatience grew apace, when, on the 2nd of July, they learned that a steamer of the line of San Francisco, from California to Shanghai, had seen the animal three weeks before in the North Pacific Ocean. The excitement caused by this news was extreme. The ship was revictualled and well stocked with coal.

Three hours before the *Abraham Lincoln* left Brooklyn pier, I received a letter worded as follows :

“ TO M. ARONNAX,
 “ Professor in the Museum of Paris,
 “ Fifth Avenue Hotel,
 “ New York.

“ SIR,—If you will consent to join the *Abraham Lincoln* in this expedition, the Government of the United States will with pleasure see France represented in the enterprise. Commander Farragut has a cabin at your disposal.

“ Very cordially yours,

“ J. B. HOBSON,
 “ *Secretary of Marine.*”

CHAPTER III

I FORM MY RESOLUTION

Three seconds before the arrival of J. B. Hobson's letter I no more thought of pursuing the unicorn than of attempting the passage of the North Sea. Three seconds after reading

the letter of the honourable Secretary of Marine, I felt that my true vocation, the sole end of my life, was to chase this disturbing monster and purge it from the world.

But I had just returned from a fatiguing journey, weary and longing for repose. I aspired to nothing more than again seeing my country, my friends, my little lodging by the Jardin des Plantes, my dear and precious collections—but nothing could keep me back ! I forgot all—fatigue, friends and collections—and accepted without hesitation the offer of the American Government.

“ Besides,” thought I, “ all roads lead back to Europe ; and the unicorn may be amiable enough to hurry me towards the coast of France. This worthy animal may allow itself to be caught in the seas of Europe (for my particular benefit), and I will not bring back less than half a yard of his ivory halberd to the Museum of Natural History.” But in the meanwhile I must seek this narwhal in the North Pacific Ocean, which, to return to France, was taking the road to the antipodes.

“ Conseil,” I called in an impatient voice.

Conseil was my servant, a true, devoted Flemish boy, who had accompanied me in all my travels. I liked him, and he returned the liking well. He was quiet by nature, regular from principle, zealous from habit, evincing little disturbance at the different surprises of life, very quick with his hands, and apt at any service required of him ; and, despite his name, never giving advice—even when asked for it.

Conseil had followed me for the last ten years wherever science led. Never once did he complain of the length or fatigue of a journey, never make an objection to pack his portmanteau for whatever country it might be, or however far away, whether China or Congo. Besides all this, he had good health, which defied all sickness, and solid muscles, but no nerves ; good morals are understood. This boy was thirty years old, and his age to that of his master as fifteen to twenty. May I be excused for saying that I was forty years old ?

But Conseil had one fault : he was ceremonious to a degree, and would never speak to me but in the third person, which was sometimes provoking.

"Conseil," said I again, beginning with feverish hands to make preparations for my departure.

Certainly I was sure of this devoted boy. As a rule, I never asked him if it were convenient for him or not to follow me in my travels ; but this time the expedition in question might be prolonged, and the enterprise might be hazardous in pursuit of an animal capable of sinking a frigate as easily as a nutshell. Here there was matter for reflection even to the most impassive man in the world. What would Conseil say ?

"Conseil," I called a third time.

Conseil appeared.

"Did you call, sir ?" said he, entering.

"Yes, my boy ; make preparations for me and yourself too. We leave in two hours."

"As you please, sir," replied Conseil, quietly.

"Not an instant to lose ; lock in my trunk all travelling utensils, coats, shirts, and stockings—without counting, as many as you can, and make haste."

"And your collections, sir ?" observed Conseil.

"They will keep them at the hotel."

"We are not returning to Paris, then ?" said Conseil.

"Oh ! certainly," I answered, evasively, "by making a curve."

"Will the curve please you, sir ?"

"Oh ! it will be nothing ; not quite so direct a road, that is all. We take our passage in the *Abraham Lincoln*."

"As you think proper, sir," coolly replied Conseil.

"You see, my friend, it has to do with the monster—the famous narwhal. We are going to purge it from the seas. A glorious mission, but a dangerous one ! We cannot tell where we may go ; these animals can be very capricious. But we will go whether or no ; we have got a captain who is pretty wide-awake."

Our luggage was transported to the deck of the frigate immediately. I hastened on board and asked for Commander Farragut. One of the sailors conducted me to the poop, where I found myself in the presence of a good-looking officer, who held out his hand to me.

"Monsieur Pierre Aronnax?" said he.

"Himself," replied I. "Commander Farragut?"

"You are welcome, Professor; your cabin is ready for you."

I bowed, and desired to be conducted to the cabin destined for me.

The *Abraham Lincoln* had been well chosen and equipped for her new destination. She was a frigate of great speed, fitted with high-pressure engines which admitted a pressure of seven atmospheres. Under this the *Abraham Lincoln* attained the mean speed of nearly eighteen knots and a third an hour—a considerable speed, but, nevertheless, insufficient to grapple with this gigantic cetacean.

The interior arrangements of the frigate corresponded to its nautical qualities. I was well satisfied with my cabin, which was in the after part, opening upon the gunroom.

"We shall be well off here," said I to Conseil.

"As well, by your honour's leave, as a hermit-crab in the shell of a whelk," said Conseil.

I left Conseil to stow our trunks conveniently away, and remounted the poop in order to survey the preparations for departure.

At that moment Commander Farragut was ordering the last moorings to be cast loose which held the *Abraham Lincoln* to the pier of Brooklyn. So in a quarter of an hour, perhaps less, the frigate would have sailed without me. I should have missed this extraordinary, supernatural, and incredible expedition, the recital of which may well meet with some suspicion.

But Commander Farragut would not lose a day nor an hour in scouring the seas in which the animal had been sighted. He sent for the engineer.

"Is the steam full on?" asked he.

"Yes, sir," replied the engineer.

"Go ahead," cried Commander Farragut.

CHAPTER IV

NED LAND

Captain Farragut was a good seaman, worthy of the frigate he commanded. His vessel and he were one. He was the soul of it. On the question of the monster there was no doubt in his mind, and he would not allow the existence of the animal to be disputed on board. He believed in it, as certain good women believe in the leviathan—by faith, not by reason. The monster did exist, and he had sworn to rid the seas of it. Either Captain Farragut would kill the narwhal, or the narwhal would kill the captain. There was no third course.

The officers on board shared the opinion of their chief. They were ever chatting, discussing, and calculating the various chances of a meeting, watching narrowly the vast surface of the ocean. More than one took up his quarters voluntarily in the cross-trees, who would have cursed such a berth under any other circumstances. As long as the sun described its daily course, the rigging was crowded with sailors, whose feet were burnt to such an extent by the heat of the deck as to render it unbearable; still the *Abraham Lincoln* had not yet breasted the suspected waters of the Pacific. As to the ship's company, they desired nothing better than to meet the unicorn, to harpoon it, hoist it on board, and despatch it. They watched the sea with eager attention.

Besides, Captain Farragut had spoken of a certain sum of two thousand dollars, set apart for whoever should first sight the monster, were he cabin-boy, common seaman, or officer.

I leave you to judge how eyes were used on board the *Abraham Lincoln*.

For my own part I was not behind the others, and left to no one my share of daily observations. The frigate might have been called the *Argus*, for a hundred reasons. Only one amongst us, Conseil, seemed to protest by his indifference against the question which so interested us all, and seemed to be out of keeping with the general enthusiasm on board.

I have said that Captain Farragut had carefully provided his ship with every apparatus for catching the gigantic cetacean. No whaler had ever been better armed. We possessed every known engine, from the harpoon thrown by the hand to the barbed arrows of the blunderbuss, and the explosive balls of the duck-gun. On the forecastle lay the perfection of a breech-loading gun, very thick at the breech, and very narrow in the bore, the model of which had been in the Exhibition of 1867. This precious weapon of American origin could throw with ease a conical projectile of nine pounds to a mean distance of ten miles.

Thus the *Abraham Lincoln* wanted for no means of destruction ; and, what was better still she had on board Ned Land, the prince of harpooners.

Ned Land was a Canadian, with an uncommon quickness of hand, and who knew no equal in his dangerous occupation. Skill, coolness, audacity, and cunning he possessed in a superior degree, and it must be a cunning whale to escape the stroke of his harpoon.

Ned Land was about forty years of age ; he was a tall man (more than six feet high), strongly built, grave and taciturn, occasionally violent, and very passionate when contradicted. His person attracted attention, but above all the boldness of his look, which gave a singular expression to his face.

Who calls himself Canadian calls himself French ; and, little communicative as Ned Land was, I must admit that he took a certain liking for me. My nationality drew him to me, no doubt. It was an opportunity for him to talk,

and for me to hear, that old language of Rabelais, which is still in use in some Canadian provinces. The harpooner's family was originally from Quebec, and was already a tribe of hardy fishermen when this town belonged to France.

Little by little, Ned Land acquired a taste for chatting, and I loved to hear the recital of his adventures in the polar seas. He related his fishing, and his combats, with natural poetry of expression; his recital took the form of an epic poem, and I seemed to be listening to a Canadian Homer singing the Iliad of the regions of the North.

I am portraying this hardy companion as I really knew him. We are old friends now, united in that unchangeable friendship which is born and cemented amidst extreme dangers. Ah, brave Ned! I ask no more than to live a hundred years longer, that I may have more time to dwell the longer on your memory.

Now, what was Ned Land's opinion upon the question of the marine monster? I must admit that he did not believe in the unicorn, and was the only one on board who did not share that universal conviction. He even avoided the subject, which I one day thought it my duty to press upon him. One magnificent evening, the 30th July (that is to say, three weeks after our departure), the frigate was abreast of Cape Blanc, thirty miles to leeward of the coast of Patagonia. We had crossed the tropic of Capricorn, and the Straits of Magellan opened less than seven hundred miles to the south. Before eight days were over the *Abraham Lincoln* would be ploughing the waters of the Pacific.

Seated on the poop, Ned Land and I were chatting of one thing and another as we looked at this mysterious sea, whose great depths had up to this time been inaccessible to the eye of man. I naturally led up the conversation to the giant unicorn, and examined the various chances of success or failure of the expedition. But, seeing that Ned Land let me speak without saying too much himself, I pressed him more closely.

"Well, Ned," said I, "is it possible that you are not

convinced of the existence of this cetacean that we are following? Have you any particular reason for being so incredulous?"

The harpooner looked at me fixedly for some moments before answering, struck his broad forehead with his hand (a habit of his), as if to collect himself, and said at last, "Perhaps I have, Mr. Aronnax."

"But, Ned, you, a whaler by profession, familiarised with all the great marine mammalia—you ought to be the last to doubt under such circumstances!"

"That is just what deceives you, Professor," replied Ned. "As a whaler I have followed many a cetacean, harpooned a great number, and killed several; but, however strong or well-armed they may have been, neither their tails nor their weapons would have been able even to scratch the iron plates of a steamer."

"But, Ned, they tell of ships which the teeth of the narwhal have pierced through and through."

"Wooden ships—that is possible," replied the Canadian, "but I have never seen it done; and, until further proof, I deny what whales, cetaceans, or sea-unicorns could ever produce the effect you describe."

"Well, Ned, I repeat it with a conviction resting on the logic of facts. I believe in the existence of a mammal powerfully organised, belonging to the branch of vertebrata, like the whales, the cachalots, or the dolphins, and furnished with a horn of defence of great penetrating power."

"Hum!" said the harpooner, shaking his head with the air of a man who would not be convinced.

"Notice one thing, my worthy Canadian," I resumed. "If such an animal is in existence, if it inhabits the depths of the ocean, if it frequents the strata lying miles below the surface of the water, it must necessarily possess an organisation the strength of which would defy all comparison."

"And why this powerful organisation?" demanded Ned.

"Because it requires incalculable strength to keep one's self in these strata and resist their pressure. Listen to me.

Let us admit that the pressure of the atmosphere is represented by the weight of a column of water thirty-two feet high. In reality the column of water would be shorter, as we are speaking of sea water, the density of which is greater than that of fresh water. Very well, when you dive, Ned, as many times 32 feet of water as there are above you, so many times does your body bear a pressure equal to that of the atmosphere, that is to say, 15 lb. for each square inch of its surface. It follows, then, that at 320 feet this pressure equals that of 10 atmospheres, of 100 atmospheres at 3,200 feet, and of 1,000 atmospheres at 32,000 feet, that is, about 6 miles ; which is equivalent to saying that if you could attain this depth in the ocean, each square three-eighths of an inch of the surface of your body would bear a pressure of 5,600 lb. Ah ! my brave Ned, do you know how many square inches you carry on the surface of your body ? ”

“ I have no idea, Mr. Aronnax.”

“ About 6,500 ; and as in reality the atmospheric pressure is about 15 lb. to the square inch, your 6,500 square inches bear at this moment a pressure of 97,500 lb.”

“ Without my perceiving it ? ”

“ Without your perceiving it. And if you are not crushed by such a pressure, it is because the air penetrates the interior of your body with equal pressure. Hence perfect equilibrium between the interior and exterior pressure, which thus neutralise each other, and which allows you to bear it without inconvenience. But in the water it is another thing.”

“ Yes, I understand,” replied Ned, becoming more attentive ; “ because the water surrounds me, but does not penetrate.”

“ Precisely, Ned : so that at 32 feet beneath the surface of the sea you would undergo a pressure of 97,500 lb. ; at 320 feet, ten times that pressure ; at 3,200 feet, a hundred times that pressure ; lastly, at 32,000 feet, a thousand times that pressure would be 97,500,000 lb.—that is to say, that

you would be flattened as if you had been drawn from the plates of a hydraulic machine ! ”

“ The devil ! ” exclaimed Ned.

“ Very well, my worthy harpooner, if some vertebrate, several hundred yards long, and large in proportion, can maintain itself in such depths—of those whose surface is represented by millions of square inches, that is by tens of millions of pounds, we must estimate the pressure they undergo. Consider, then, what must be the resistance of their bony structure, and the strength of their organisation to withstand such pressure ! ”

“ Why ! ” exclaimed Ned Land, “ they must be made of iron plates eight inches thick, like the armoured frigates.”

“ As you say, Ned. And think what destruction such a mass would cause, if hurled with the speed of an express train against the hull of a vessel.”

“ Yes—certainly—perhaps,” replied the Canadian, shaken by these figures, but not yet willing to give in.

“ Well, have I convinced you ? ”

“ You have convinced me of one thing, sir, which is that, if such animals do exist at the bottom of the seas, they must necessarily be as strong as you say.”

“ But if they do not exist, mine obstinate harpooner, how explain the accident to the *Scotia* ? ”

CHAPTER V

AT A VENTURE

The voyage of the *Abraham Lincoln* was for a long time marked by no special incident. But one circumstance happened which showed the wonderful dexterity of Ned Land, and proved what confidence we might place in him.

The 30th of June, the frigate spoke some American whalers, from whom we learned that they knew nothing about the narwhal. But one of them, the captain of the

Monroe, knowing that Ned Land had shipped on board the *Abraham Lincoln*, begged for his help in chasing a whale they had in sight. Commander Farragut, desirous of seeing Ned Land at work, gave him permission to go on board the *Monroe*. And fate served our Canadian so well that, instead of one whale, he harpooned two with a double blow, striking one straight to the heart, and catching the other after some minutes' pursuit.

Decidedly, if the monster ever had to do with Ned Land's harpoon, I would not bet in its favour.

The frigate skirted the south-east coast of America with great rapidity. The 3rd of July we were at the opening of the Straits of Magellan, level with Cape Vierge. But Commander Farragut would not take a tortuous passage, but doubled Cape Horn.

The ship's crew agreed with him. And certainly it was possible that they might meet the narwhal in this narrow pass. Many of the sailors affirmed that the monster could not pass there, "that he was too big for that!"

The 6th of July, about three o'clock in the afternoon, the *Abraham Lincoln*, at fifteen miles to the south, doubled the solitary island, this lost rock at the extremity of the American continent, to which some Dutch sailors gave the name of their native town, Cape Horn. The course was taken towards the north-west, and the next day the screw of the frigate was at last beating the waters of the Pacific.

"Keep your eyes open!" called out the sailors.

And they were opened widely. Both eyes and glasses, a little dazzled, it is true, by the prospect of two thousand dollars, had not an instant's repose.

I myself, for whom money had no charms, was not the least attentive on board. Giving but few minutes to my meals, but a few hours to sleep, indifferent to either rain or sunshine, I did not leave the poop of the vessel. Now leaning on the netting of the forecabin, now on the taffrail, I devoured with eagerness the soft foam which whitened the sea as far as the eye could reach; and how often have I

shared the emotion of the majority of the crew, when some capricious whale raised its black back above the waves ! The poop of the vessel was crowded on a moment. The cabins poured forth a torrent of sailors and officers, each with heaving breast and troubled eye watching the course of the cetacean. I looked and looked till I was nearly blind, whilst Conseil kept repeating in a calm voice :

“ If, sir, you would not squint so much, you would see better ! ”

But vain excitement ! The *Abraham Lincoln* checked its speed and made for the animal signalled, a simple whale, or common cachalot, which soon disappeared amidst a storm of abuse.

But the weather was good. The voyage was being accomplished under the most favourable auspices. It was then the bad season in Australia, the July of that zone corresponding to our January in Europe ; but the sea was beautiful and easily scanned round a vast circumference.

The 20th July, the tropic of Capricorn was cut by 105° of longitude, and the 27th of the same month we crossed the Equator on the 110th meridian. This passed, the frigate took a more decided westerly direction, and scoured the central waters of the Pacific. Commander Farragut thought, and with reason, that it was better to remain in deep water, and keep clear of continents or islands, which the beast itself seemed to shun (perhaps because there was not enough water for him ! suggested the greater part of the crew). The frigate passed at some distance from the Marquesas and the Sandwich Islands, crossed the tropic of Cancer, and made for the China Seas. We were on the theatre of the last diversions of the monster : and, to say truth, we no longer *lived* on board. The entire ship's crew were undergoing a nervous excitement, of which I can give no idea : they could not eat, they could not sleep—twenty times a day, a misconception or an optical illusion of some sailor seated on the taffrail, would cause dreadful perspirations, and these emotions, twenty times repeated,

kept us in a state of excitement so violent that a reaction was unavoidable.

And truly, reaction soon showed itself. For three months, during which a day seemed an age, the *Abraham Lincoln* furrowed all the waters of the Northern Pacific, running at whales, making sharp deviations from her course, veering suddenly from one tack to another, stopping suddenly, putting on steam, and backing ever and anon at the risk of deranging her machinery, and not one point of the Japanese or American coast was left unexplored.

The warmest partisans of the enterprise now became its most ardent detractors. Reaction mounted from the crew to the captain himself, and certainly, had it not been for the resolute determination on the part of Captain Farragut, the frigate would have headed due southward. This useless search could not last much longer. The *Abraham Lincoln* had nothing to reproach herself with, she had done her best to succeed. Never had an American ship's crew shown more zeal or patience ; its failure could not be placed to their charge—there remained nothing but to return.

This was represented to the commander. The sailors could not hide their discontent, and the service suffered. I will not say there was a mutiny on board, but after a reasonable period of obstinacy, Captain Farragut (as Columbus did) asked for three days' patience. If in three days the monster did not appear, the man at the helm should give three turns of the wheel, and the *Abraham Lincoln* would make for the European seas.

This promise was made on the 2nd of November. It had the effect of rallying the ship's crew. The ocean was watched with renewed attention. Each one wished for a last glance in which to sum up his remembrance. Glasses were used with feverish activity. It was a grand defiance given to the giant narwhal, and he could scarcely fail to answer the summons and "appear."

Two days passed, the steam was at half pressure ; a thousand schemes were tried to attract the attention and

stimulate the apathy of the animal in case it should be met in those parts. Large quantities of bacon were trailed in the wake of the ship, to the great satisfaction (I must say) of the sharks. Small craft radiated in all directions round the *Abraham Lincoln* as she lay to, and did not leave a spot of the sea unexplored. But the night of the 4th of November arrived without the unveiling of this submarine mystery.

The next day, the 5th of November, at twelve, the delay would (morally speaking) expire ; after that time, Commander Farragut, faithful to his promise, was to turn the course to the south-east and abandon for ever the northern regions of the Pacific.

The frigate was then in $31^{\circ} 15' N.$ lat. and $136^{\circ} 42' E.$ long. The coast of Japan still remained less than two hundred miles to leeward. Night was approaching. They had just struck eight bells ; large clouds veiled the face of the moon, then in its first quarter. The sea undulated peaceably under the stern of the vessel.

At that moment I was leaning forward on the starboard netting. Conseil, standing near me, was looking straight before him. The crew, perched in the ratlines, examined the horizon which contracted and darkened by degrees. Officers with their night glasses scoured the growing darkness : sometimes the ocean sparkled under the rays of the moon, which darted between two clouds, then all trace of light was lost in the darkness.

In looking at Conseil, I could see he was undergoing a little of the general influence. At least I thought so. Perhaps for the first time his nerves vibrated to a sentiment of curiosity.

"Come, Conseil," said I, "this is the last chance of pocketing the two thousand dollars."

"May I be permitted to say, sir," replied Conseil, "that I never reckoned on getting the prize ; and, had the government of the Union offered a hundred thousand dollars, it would have been none the poorer."

"You are right, Conseil. It is a foolish affair after all, and

one upon which we entered too lightly. What time lost, what useless emotions ! We should have been back in France six months ago."

"In your little room, sir," replied Conseil, "and in your museum, sir ; and I should have already classed all your fossils, sir. And the Babiroussa would have been installed in its cage in the Jardin des Plantes, and have drawn all the curious people of the capital !"

"As you say, Conseil. I fancy we shall run a fair chance of being laughed at for our pains."

"That's tolerably certain," replied Conseil, quietly ; "I think they will make fun of you, sir. And, must I say it——?"

"Go on, my good friend."

"Well, sir, you will only get your deserts."

"Indeed !"

"When one has the honour of being a savant as you are, sir, one should not expose one's self to——"

Conseil had not time to finish his compliment. In the midst of general silence a voice had just been heard. It was the voice of Ned Land shouting :

"Look out there ! The very thing we are looking for—on our weather beam !"

CHAPTER VI

AT FULL STEAM

At this cry the whole ship's crew hurried towards the harpooner—commander, officers, masters, sailors, cabin-boys ; even the engineers left their engines, and the stokers their furnaces.

The order to stop her had been given, and the frigate now simply went on by her own momentum. The darkness was then profound, and, however good the Canadian's eyes were, I asked myself how he had managed to see, and what he had been able to see. My heart beat as if it would break.

But Ned Land was not mistaken, and we all perceived the object he pointed to. At two cables' length from the *Abraham Lincoln*, on the starboard quarter, the sea seemed to be illuminated all over. It was not a mere phosphoric phenomenon. The monster emerged some fathoms from the water, and then threw out that very intense but mysterious light mentioned in the report of several captains. This magnificent irradiation must have been produced by an agent of great *shining* power. The luminous part traced on the sea an immense oval, much elongated, the centre of which condensed a burning heat, whose overpowering brilliancy died out by successive gradations.

"It is only a massing of phosphoric particles," cried one of the officers.

"No, sir, certainly not," I replied. "That brightness is of an essentially electrical nature. Besides, see, see! it moves; it is moving forwards, backwards; it is darting towards us!"

A general cry arose from the frigate.

"Silence!" said the captain. "Up with the helm, reverse the engines."

The steam was shut off, and the *Abraham Lincoln*, beating to port, described a semicircle.

"Right the helm, go ahead," cried the captain.

These orders were executed, and the frigate moved rapidly from the burning light.

I was mistaken. She tried to sheer off, but the supernatural animal approached with a velocity double her own.

We gasped for breath. Stupefaction more than fear made us dumb and motionless. The animal gained on us, sporting with the waves. It made the round of the frigate, which was then making fourteen knots, and enveloped it with its electric rings like luminous dust.

Then it moved away two or three miles, leaving a phosphorescent track, like those volumes of steam that the express trains leave behind. All at once from the dark line of the horizon whither it retired to gain its momentum, the

monster rushed suddenly towards the *Abraham Lincoln* with alarming rapidity, stopped suddenly about twenty feet from the hull, and died out—not diving under the water, for its brilliancy did not abate—but suddenly, and as if the source of this brilliant emanation was exhausted. Then it reappeared on the other side of the vessel, as if it had turned and slid under the hull. Any moment a collision might have occurred which would have been fatal to us. However, I was astonished at the manœuvres of the frigate. She fled and did not attack.

On the captain's face, generally so impassive, was an expression of unaccountable astonishment.

"Mr. Aronnax," he said, "I do not know with what formidable being I have to deal, and I will not imprudently risk my frigate in the midst of this darkness. Besides, how attack this unknown thing, how defend one's self from it? Wait for daylight, and the scene will change."

"You have no further doubt, captain, of the nature of the animal?"

"No, sir; it is evidently a gigantic narwhal, and an electric one."

"Perhaps," added I, "one can only approach it with a torpedo."

"Undoubtedly," replied the captain, "if it possesses such dreadful power, it is the most terrible animal that ever was created. That is why, sir, I must be on my guard."

The crew were on their feet all night. No one thought of sleep. The *Abraham Lincoln*, not being able to struggle with such velocity, had moderated its pace, and sailed at half speed. For its part, the narwhal, imitating the frigate, let the waves rock it at will, and seemed decided not to leave the scene of the struggle. Towards midnight, however, it disappeared, or, to use a more appropriate term, it "died out" like a large glow-worm. Had it fled? One could only fear, not hope it. But at seven minutes to one o'clock in the morning a deafening whistling was heard, like that produced by a body of water rushing with great violence.

The captain, Ned Land, and I were then on the poop, eagerly peering through the profound darkness.

"Ned Land," asked the commander, "you have often heard the roaring of whales?"

"Often, sir; but never such whales the sight of which brought me in two thousand dollars. If I can only approach within four harpoons' length of it!"

"But to approach it," said the commander, "I ought to put a whaler at your disposal?"

"Certainly, sir."

"That will be trifling with the lives of my men."

"And mine too," simply said the harpooner.

Towards two o'clock in the morning, the burning light reappeared, not less intense, about five miles to windward of the *Abraham Lincoln*. Notwithstanding the distance, and the noise of the wind and sea, one heard distinctly the loud strokes of the animal's tail, and even its panting breath. It seemed that, at the moment that the enormous narwhal had come to take breath at the surface of the water, the air was engulfed in its lungs, like the steam in the vast cylinders of a machine of two thousand horse-power.

"Hum!" thought I, "a whale with the strength of a cavalry regiment would be a pretty whale!"

We were on the *qui vive* till daylight, and prepared for the combat. The fishing implements were laid along the hammock nettings. The second lieutenant loaded the blunderbusses, which could throw harpoons to the distance of a mile, and long duck-guns, with explosive bullets, which inflicted mortal wounds even to the most terrible animals. Ned Land contented himself with sharpening his harpoon—a terrible weapon in his hands.

At six o'clock day began to break; and, with the first glimmer of light, the electric light of the narwhal disappeared. At seven o'clock the day was sufficiently advanced, but a very thick sea fog obscured our view, and the best spy-glasses could not pierce it. That caused disappointment and anger.

I climbed the mizen-mast. Some officers were already perched on the mast-heads. At eight o'clock the fog lay heavily on the waves, and its thick scrolls rose little by little. The horizon grew wider and clearer at the same time. Suddenly, just as on the day before, Ned Land's voice was heard :

"The thing itself on the port quarter!" cried the harpooner.

Every eye was turned towards the point indicated. There, a mile and a half from the frigate, a long blackish body emerged a yard above the waves. Its tail, violently agitated, produced a considerable eddy. Never did a tail beat the sea with such violence. An immense track, of dazzling whiteness, marked the passage of the animal, and described a long curve.

The frigate approached the cetacean. I examined it thoroughly.

The reports of the *Shannon* and of the *Helvetia* had rather exaggerated its size, and I estimated its length at only two hundred and fifty feet. As to its dimensions, I could only conjecture them to be admirably proportioned. While I watched this phenomenon, two jets of steam and water were ejected from its vents, and rose to the height of 120 feet ; thus I ascertained its way of breathing. I concluded definitely that it belonged to the vertebrate branch, class mammalia.

The crew waited impatiently for their chief's orders. The latter, after having observed the animal attentively, called the engineer. The engineer ran to him.

"Sir," said the commander, "you have steam up?"

"Yes, sir," answered the engineer.

"Well, make up your fires and put on all steam."

Three hurrahs greeted this order. The time for the struggle had arrived. Some moments after, the two funnels of the frigate vomited torrents of black smoke, and the bridge quaked under the trembling of the boilers.

The *Abraham Lincoln*, propelled by her wonderful screw,

went straight at the animal. The latter allowed it to come within half a cable's length ; then, as if disdaining to dive, it took a little turn, and stopped a short distance off.

This pursuit lasted nearly three-quarters of an hour, without the frigate gaining two yards on the cetacean. It was quite evident that at that rate we should never come up with it.

" Well, Mr. Land," asked the captain, " do you advise me to put the boats out to sea ? "

" No, sir," replied Ned Land ; " because we shall not take that beast easily."

" What shall we do then ? "

" Put on more steam if you can, sir. With your leave, I mean to post myself under the bowsprit, and, if we get within harpooning distance, I shall throw my harpoon."

" Go, Ned," said the captain. " Engineer, put on more pressure."

Ned Land went to his post. The fires were increased, the screw revolved forty-three times a minute, and the steam poured out of the valves. We heaved the log, and calculated that the *Abraham Lincoln* was going at the rate of $18\frac{1}{2}$ miles an hour.

But the accursed animal swam too at the rate of $18\frac{1}{2}$ miles.

For a whole hour the frigate kept up this pace, without gaining six feet. It was humiliating for one of the swiftest sailers in the American navy. A stubborn anger seized the crew ; the sailors abused the monster, who, as before, disdained to answer them ; the captain no longer contented himself with twisting his beard—he gnawed it.

The engineer was called again.

" You have turned full steam on ? "

" Yes, sir," replied the engineer.

The speed of the *Abraham Lincoln* increased. Its masts trembled down to their stepping holes, and the clouds of smoke could hardly find way out of the narrow funnels.

They heaved the log a second time.

"Well?" asked the captain of the man at the wheel.

"Nineteen miles and three-tenths, sir."

"Clap on more steam."

The engineer obeyed. The manometer showed ten degrees. But the cetacean grew warm itself, no doubt; for without straining itself, it made $19\frac{3}{10}$ miles.

What a pursuit! No, I cannot describe the emotion that vibrated through me. Ned Land kept his post, harpoon in hand. Several times the animal let us gain upon it.—"We shall catch it! we shall catch it!" cried the Canadian. But just as he was going to strike, the cetacean stole away with a rapidity that could not be estimated at less than thirty miles an hour, and even during our maximum of speed, it bullied the frigate, going round and round it. A cry of fury broke from everyone!

At noon we were no further advanced than at eight o'clock in the morning.

The captain then decided to take more direct means.

"Ah!" said he, "that animal goes quicker than the *Abraham Lincoln*. Very well! we will see whether it will escape these conical bullets. Send your men to the fore-castle, sir."

The fore-castle gun was immediately loaded and slewed round. But the shot passed some feet above the cetacean, which was half a mile off.

"Another, more to the right," cried the commander, "and five dollars to whoever will hit that infernal beast."

An old gunner with a grey beard—that I can see now—with steady eye and grave face, went up to the gun and took a long aim. A loud report was heard, with which were mingled the cheers of the crew.

The bullet did its work; it hit the animal, but not fatally, and, sliding off the rounded surface, was lost in two miles depth of sea.

The chase began again, and the captain, leaning towards me, said:

"I will pursue that beast till my frigate bursts up."

"Yes," answered I ; " and you will be quite right to do it."

I wished the beast would exhaust itself, and not be insensible to fatigue like a steam engine. But it was of no use. Hours passed, without its showing any signs of exhaustion.

However, it must be said in praise of the *Abraham Lincoln* that she struggled on indefatigably. I cannot reckon the distance she made under three hundred miles during this unlucky day, November the 6th. But night came on, and overshadowed the rough ocean.

Now I thought our expedition was at an end, and that we should never again see the extraordinary animal. I was mistaken. At ten minutes to eleven in the evening, the electric light reappeared three miles to windward of the frigate, as pure, as intense as during the preceding night.

The narwhal seemed motionless ; perhaps, tired with its day's work, it slept, letting itself float with the undulation of the waves. Now was a chance of which the captain resolved to take advantage.

He gave his orders. The *Abraham Lincoln* kept up half-steam, and advanced cautiously so as not to awake its adversary. It is no rare thing to meet in the middle of the ocean whales so sound asleep that they can be successfully attacked, and Ned Land had harpooned more than one during its sleep. The Canadian went to take his place again under the bowsprit.

The frigate approached noiselessly, stopped at two cables' lengths from the animal, and following its track. No one breathed ; a deep silence reigned on the bridge. We were not a hundred feet from the burning focus, the light of which increased and dazzled our eyes.

At this moment, leaning on the forecastle bulwark, I saw below me Ned Land grappling the martingale in one hand, brandishing his terrible harpoon in the other, scarcely twenty feet from the motionless animal. Suddenly his arm straightened, and the harpoon was thrown ; I heard the

sonorous stroke of the weapon, which seemed to have struck a hard body. The electric light went out suddenly, and two enormous waterspouts broke over the bridge of the frigate, rushing like a torrent from stem to stern, overthrowing men, and breaking the lashings of the spars. A fearful shock followed, and, thrown over the rail without having time to stop myself, I fell into the sea.

CHAPTER VII

AN UNKNOWN SPECIES OF WHALE

THIS unexpected fall so stunned me that I have no clear recollection of my sensations at the time. I was at first drawn down to a depth of about twenty feet. I am a good swimmer (though without pretending to rival Byron or Edgar Poe, who were masters of the art), and in that plunge I did not lose my presence of mind. Two vigorous strokes brought me to the surface of the water. My first care was to look for the frigate. Had the crew seen me disappear? Had the *Abraham Lincoln* veered round? Would the captain put out a boat? Might I hope to be saved?

The darkness was intense. I caught a glimpse of a black mass disappearing in the east, its beacon lights dying out in the distance. It was the frigate! I was lost.

“Help, help!” I shouted, swimming towards the *Abraham Lincoln* in desperation.

My clothes encumbered me; they seemed glued to my body, and paralysed my movements.

I was sinking! I was suffocating!

“Help!”

This was my last cry. My mouth filled with water; I struggled against being drawn down the abyss. Suddenly my clothes were seized by a strong hand, and I felt myself quickly drawn up to the surface of the sea; and I heard, yes, I heard these words pronounced in my ear:

"If master would be so good as to lean on my shoulder, master would swim with much greater ease."

I seized with one hand my faithful Conseil's arm.

"Is it you?" said I, "you?"

"Myself," answered Conseil; "and waiting master's orders."

"That shock threw you as well as me into the sea?"

"No; but, being in my master's service, I followed him."

The worthy fellow thought that was but natural.

"And the frigate?" I asked.

"The frigate?" replied Conseil, turning on his back; "I think that master had better not count too much on her."

"You think so?"

"I say that, at the time I threw myself into the sea, I heard the men at the wheel say, 'The screw and the rudder are broken.'"

"Broken?"

"Yes, broken by the monster's teeth. It is the only injury the *Abraham Lincoln* has sustained. But it is a bad look-out for us—she no longer answers her helm."

"Then we are lost!"

"Perhaps so," calmly answered Conseil. "However, we have still several hours before us, and one can do a good deal in some hours."

Conseil's imperturbable coolness set me up again. I swam more vigorously; but, cramped by my clothes, which stuck to me like a leaden weight, I felt great difficulty in bearing up. Conseil saw this.

"Will master let me make a slit?" said he; and, slipping an open knife under my clothes, he ripped them up from top to bottom very rapidly. Then he cleverly slipped them off me, while I swam for both of us.

Then I did the same for Conseil, and we continued to swim near to each other.

Nevertheless, our situation was no less terrible. Perhaps

our disappearance had not been noticed ; and, if it had been, the frigate could not tack, being without its helm. Conseil argued on this supposition, and laid his plans accordingly. This quiet boy was perfectly self-possessed. We then decided that, as our only chance of safety was being picked up by the *Abraham Lincoln's* boats, we ought to manage so as to wait for them as long as possible. I resolved then to husband our strength, so that both should not be exhausted at the same time ; and this is how we managed : while one of us lay on our back, quite still, with arms crossed, and legs stretched out, the other would swim and push the other on in front. This towing business did not last more than ten minutes each ; and relieving each other thus, we could swim on for some hours, perhaps till day-break. Poor chance ! but hope is so firmly rooted in the heart of man ! Moreover, there were two of us. Indeed I declare (though it may seem improbable) if I sought to destroy all hope—if I wished to despair, I could not.

The collision of the frigate with the cetacean had occurred about eleven o'clock in the evening before. I reckoned then we should have eight hours to swim before sunrise, an operation quite practicable if we relieved each other. The sea, very calm, was in our favour. Sometimes I tried to pierce the intense darkness that was only dispelled by the phosphorescence caused by our movements. I watched the luminous waves that broke over my hand, whose mirror-like surface was spotted with silvery rings. One might have said that we were in a bath of quicksilver.

Near one o'clock in the morning, I was seized with dreadful fatigue. My limbs stiffened under the strain of violent cramp. Conseil was obliged to keep me up, and our preservation devolved on him alone. I heard the poor boy pant ; his breathing became short and hurried. I found that he could not keep up much longer.

“ Leave me ! leave me ! ” I said to him.

“ Leave my master ? Never ! ” replied he. “ I would drown first.”

Just then the moon appeared through the fringes of a thick cloud that the wind was driving to the east. The surface of the sea glittered with its rays. This kindly light re-animates us. My head got better again. I looked at all points of the horizon. I saw the frigate ! She was five miles from us, and looked like a dark mass, hardly discernible. But no boats !

I would have cried out. But what good would it have been at such a distance ! My swollen lips could utter no sounds. Conseil could articulate some words, and I heard him repeat at intervals, " Help ! help ! "

Our movements were suspended for an instant ; we listened. It might be only a singing in the ear, but it seemed to me as if a cry answered the cry from Conseil.

" Did you hear ? " I murmured.

" Yes ! Yes ! "

And Conseil gave one more despairing cry.

This time there was no mistake ! A human voice responded to ours ! Was it the voice of another unfortunate creature, abandoned in the middle of the ocean, some other victim of the shock sustained by the vessel ? Or rather was it a boat from the frigate, that was hailing us in the darkness ?

Conseil made a last effort, and, leaning on my shoulder, while I struck out in a desperate effort, he raised himself half out of the water, then fell back exhausted.

" What did you see ? "

" I saw——" murmured he ; " I saw—but do not talk—reserve all your strength ! "

What had he seen ? Then, I know not why, the thought of the monster came into my head for the first time ! But that voice ! The time is past for Jonahs to take refuge in whales' bellies ! However, Conseil was towing me again. He raised his head sometimes, looked before us, and uttered a cry of recognition, which was responded to by a voice that came nearer and nearer. I scarcely heard it. My strength was exhausted ; my fingers stiffened ; my hand afforded me support no longer ; my mouth, convulsively

opening, filled with salt water. Cold crept over me. I raised my head for the last time, then I sank.

At this moment a hard body struck me. I clung to it : then I felt that I was being drawn up, that I was brought to the surface of the water, that my chest collapsed—I fainted.

It is certain that I soon came to, thanks to the vigorous rubbings that I received. I half opened my eyes.

“ Conseil ! ” I murmured.

“ Does master call me ? ” asked Conseil.

Just then, by the waning light of the moon which was sinking down to the horizon, I saw a face which was not Conseil’s and which I immediately recognised.

“ Ned ! ” I cried.

“ The same, sir, who is seeking his prize ! ” replied the Canadian.

“ Were you thrown into the sea by the shock to the frigate ? ”

“ Yes, Professor ; but more fortunate than you, I was able to find a footing almost directly upon a floating island.”

“ An island ? ”

“ Or, more correctly speaking, on our gigantic narwhal.”

“ Explain yourself, Ned ! ”

“ Only I soon found out why my harpoon had not entered its skin and was blunted.”

“ Why, Ned, why ? ”

“ Because, Professor, that beast is made of sheet iron.”

The Canadian’s last words produced a sudden revolution in my brain. I wriggled myself quickly to the top of the being, or object, half out of the water, which served us for a refuge. I kicked it. It was evidently a hard, impenetrable body, and not the soft substance that forms the bodies of the great marine mammalia. But this hard body might be a bony covering, like that of the antediluvian animals ; and I should be free to class this monster among amphibious reptiles, such as tortoises or alligators.

Well, no ! the blackish back that supported me was

smooth, polished, without scales. The blow produced a metallic sound ; and, incredible though it may be, it seemed, I might say, as if it was made of riveted plates.

There was no doubt about it ! This monster, this natural phenomenon that had puzzled the learned world, and overthrown and misled the imagination of seamen of both hemispheres, it must be owned was a still more astonishing phenomenon, inasmuch as it was a simply human construction.

We had no time to lose, however. We were lying upon the back of a sort of submarine boat, which appeared (as far as I could judge) like a huge fish of steel. Ned Land's mind was made up on this point. Conseil and I could only agree with him.

Just then a bubbling began at the back of this strange thing (which was evidently propelled by a screw), and it began to move. We had only just time to seize hold of the upper part, which rose about seven feet out of the water, and happily its speed was not great.

"As long as it sails horizontally," muttered New Land, "I do not mind ; but, if it takes a fancy to dive, I would not give two straws for my life."

The Canadian might have said still less. It became really necessary to communicate with the beings, whatever they were, shut up inside the machine. I searched all over the outside for an aperture, a panel, or a manhole, to use a technical expression ; but the lines of the iron rivets, solidly driven into the joints of the iron plates, were clear and uniform. Besides, the moon disappeared then, and left us in total darkness.

At last this long night passed. My indistinct remembrance prevents my describing all the impressions it made. I can only recall one circumstance. During some lulls of the wind and sea, I fancied I heard several times vague sounds, a sort of fugitive harmony produced by words of command. What was, then, the mystery of this submarine craft, of which the whole world vainly sought an explanation ?

What kind of beings existed in this strange boat? What mechanical agent caused its prodigious speed?

Daybreak appeared. The morning mists surrounded us, but they soon cleared off. I was about to examine the hull, which formed on deck a kind of horizontal platform, when I felt it gradually sinking.

"Oh! confound it!" cried Ned Land, kicking the resounding plate. "Open, you inhospitable rascals!"

Happily the sinking movement ceased. Suddenly a noise, like iron works violently pushed aside, came from the interior of the boat. One iron plate was moved, a man appeared, uttered an odd cry, and disappeared immediately.

Some moments after, eight strong men, with masked faces, appeared noiselessly, and drew us down into their formidable machine.

CHAPTER VIII

MOBILIS IN MOBILI

THIS forcible abduction, so roughly carried out, was accomplished with the rapidity of lightning. I shivered all over. Whom had we to deal with? No doubt some new sort of pirates, who explored the sea in their own way. Hardly had the narrow panel closed upon me, when I was enveloped in darkness. My eyes, dazzled with the outer light, could distinguish nothing. I felt my naked feet cling to the rungs of an iron ladder. Ned Land and Conseil, firmly seized, followed me. At the bottom of the ladder, a door opened, and shut after us immediately with a bang.

We were alone. Where, I could not say, hardly imagine. All was black, and such a dense black that, after some minutes, my eyes had not been able to discern even the faintest glimmer.

Meanwhile, Ned Land, furious at these proceedings, gave free vent to his indignation.

"Confound it!" cried he, "here are people who come up to the Scotch for hospitality. They only just miss being cannibals. I should not be surprised at it, but I declare that they shall not eat me without my protesting."

"Calm yourself, friend Ned, calm yourself," replied Conseil, quietly. "Do not cry out before you are hurt. We are not quite done for yet."

"Not quite," sharply replied the Canadian, "but pretty near, at all events. Things look black. Happily, my bowie-knife I have still, and I can always see well enough to use it. The first of these pirates who lays a hand on me——"

"Do not excite yourself, Ned," I said to the harpooner, "and do not compromise us by useless violence. Who knows that they will not listen to us? Let us rather try to find out where we are."

I groped about. In five steps I came to an iron wall, made of plates bolted together. Then turning back I struck against a wooden table, near which were ranged several stools. The boards of this prison were concealed under a thick mat, which deadened the noise of the feet. The bare walls revealed no trace of window or door. Conseil, going round the reverse way, met me, and we went back to the middle of the cabin, which measured about twenty feet by ten. As to its height, Ned Land, in spite of his own great height, could not measure it.

Half an hour had already passed without our situation being bettered, when the dense darkness suddenly gave way to extreme light. Our prison was suddenly lighted, that is to say, it became filled with a luminous matter, so strong that I could not bear it at first. In its whiteness and intensity I recognised that electric light which played round the submarine boat like a magnificent phenomenon of phosphorescence. After shutting my eyes involuntarily, I opened them, and saw that this luminous agent came from a half globe, unpolished, placed in the roof of the cabin.

"At last one can see," cried Ned Land, who, knife in hand, stood on the defensive.

"Yes," said I; "but we are still in the dark about ourselves."

"Let master have patience," said the imperturbable Conseil.

The sudden lighting of the cabin enabled me to examine it minutely. It only contained a table and five stools. The invisible door might be hermetically sealed. No noise was heard. All seemed dead in the interior of this boat. Did it move, did it float on the surface of the ocean, or did it dive into its depths? I could not guess.

A noise of bolts was now heard, the door opened, and two men appeared.

One was short, very muscular, broad-shouldered, with robust limbs, strong head, an abundance of black hair, thick moustache, a quick penetrating look, and the vivacity which characterises the population of Southern France.

The second stranger merits a more detailed description. I made out his prevailing qualities directly: self-confidence—because his head was well set on his shoulders, and his black eyes looked around with cold assurance; calmness—for his skin, rather pale, showed his coolness of blood; energy—evinced by the rapid contraction of his lofty brows; and courage—because his deep breathing denoted great power of lungs.

Whether this person was thirty-five or fifty years of age, I could not say. He was tall, had a large forehead, straight nose, a clearly cut mouth, beautiful teeth, with fine taper hands, indicative of a highly nervous temperament. This man was certainly the most admirable specimen I had ever met. One particular feature was his eyes, rather far from each other, and which could take in nearly a quarter of the horizon at once.

This faculty—(I verified it later)—gave him a range of vision far superior to Ned Land's. When this stranger fixed upon an object, his eyebrows met, his large eyelids closed around so as to contract the range of his vision, and he looked as if he magnified the objects lessened by distance,

as if he pierced those sheets of water so opaque to our eyes, and as if he read the very depths of the seas.

The two strangers, with caps made from the fur of the sea otter, and shod with sea boots of seal's skin, were dressed in clothes of a particular texture, which allowed free movement of the limbs. The taller of the two, evidently the chief on board, examined us with great attention, without saying a word ; then, turning to his companion, talked with him in an unknown tongue. It was a sonorous, harmonious, and flexible dialect, the vowels seeming to admit of very varied accentuation.

The other replied by a shake of the head, and added two or three perfectly incomprehensible words. Then he seemed to question me by a look.

I replied in good French that I did not know his language; but he seemed not to understand me, and my situation became more embarrassing.

"If master were to tell our story," said Conseil, "perhaps these gentlemen may understand some words."

I began to tell our adventures, articulating each syllable clearly, and without omitting one single detail. I announced our names and rank, introducing in person Professor Aronnax, his servant Conseil, and master Ned Land, the harpooner.

The man with the soft calm eyes listened to me quietly, even politely, and with extreme attention ; but nothing in his countenance indicated that he had understood my story. When I finished, he said not a word.

There remained one resource, to speak English. Perhaps they would know this almost universal language. I knew it—as well as the German language—well enough to read it fluently, but not to speak it correctly. But, anyhow, we must make ourselves understood.

"Go on in your turn," I said to the harpooner ; "speak your best Anglo-Saxon, and try to do better than I."

Ned did not beg off, and recommenced our story.

To his great disgust, the harpooner did not seem to have

made himself more intelligible than I had. Our visitors did not stir. They evidently understood neither the language of England nor of France.

Very much embarrassed, after having vainly exhausted our speaking resources, I knew not what part to take, when Conseil said :

“ If master will permit me, I will relate it in German.”

But in spite of the elegant terms and good accent of the narrator, the German language had no success. At last, nonplussed, I tried to remember my first lessons, and to narrate our adventures in Latin, but with no better success. This last attempt being of no avail, the two strangers exchanged some words in their unknown language, and retired.

The door shut.

“ It is an infamous shame,” cried Ned Land, who broke out for the twentieth time. “ We speak to those rogues in French, English, German, and Latin, and not one of them has the politeness to answer ! ”

“ Calm yourself,” I said to the impetuous Ned ; “ anger will do no good.”

“ But do you see, Professor,” replied our irascible companion, “ that we shall absolutely die of hunger in this iron cage ? ”

“ Bah ! ” said Conseil, philosophically ; “ we can hold out some time yet.”

“ My friends,” I said, “ we must not despair. We have been worse off than this. Do me the favour to wait a little before forming an opinion upon the commander and crew of this boat.”

“ My opinion is formed,” replied Ned Land, sharply. “ They are rascals.”

“ Good ! and from what country ? ”

“ From the land of rogues ! ”

“ My brave Ned, that country is not clearly indicated on the map of the world ; but I admit that the nationality of the two strangers is hard to determine. Neither English, French, nor German, that is quite certain. However, I

am inclined to think that the commander and his companion were born in low latitudes. There is southern blood in them. But I cannot decide by their appearance whether they are Spaniards, Turks, Arabians, or Indians. As to their language, it is quite incomprehensible."

"There is the disadvantage of not knowing all languages," said Conseil, "or the disadvantage of not having one universal language."

As he said these words, the door opened. A steward entered. He brought us clothes, coats and trousers, made of a stuff I did not know. I hastened to dress myself, and my companions followed my example. During that time, the steward—dumb, perhaps deaf—had arranged the table, and laid three plates.

"This is something like!" said Conseil.

"Bah!" said the angry harpooner, "what do you suppose they eat here? Tortoise liver, filleted shark, and beefsteaks from seadogs."

"We shall see," said Conseil.

The dishes, of bell metal, were placed on the table, and we took our places. Undoubtedly we had to do with civilised people, and, had it not been for the electric light which flooded us, I could have fancied I was in the dining-room of the Adelphi Hotel at Liverpool, or at the Grand Hotel in Paris. I must say, however, that there was neither bread nor wine. The water was fresh and clear, but it was water and did not suit Ned Land's taste. Amongst the dishes which were brought to us, I recognised several fish delicately dressed; but of some, although excellent, I could give no opinion, neither could I tell to what kingdom they belonged, whether animal or vegetable. As to the dinner-service, it was elegant, and in perfect taste. Each utensil—spoon, fork, knife, plate—had a letter engraved on it, with a motto above it, of which this is an exact facsimile:

MOBILIS IN MOBILI
N

The letter N was no doubt the initial of the name of the enigmatical person who commanded at the bottom of the seas.

Ned and Conseil did not reflect much. They devoured the food, and I did likewise. I was, besides, reassured as to our fate ; and it seemed evident that our hosts would not let us die of want.

However, everything has an end, everything passes away, even the hunger of people who have not eaten for fifteen hours. Our appetites satisfied, we felt overcome with sleep.

“Faith ! I shall sleep well,” said Conseil.

“So shall I,” replied Ned Land.

My two companions stretched themselves on the cabin carpet, and were soon sound asleep. For my own part, too many thoughts crowded my brain, too many insoluble questions pressed upon me, too many fancies kept my eyes half open. Where were we ? What strange power carried us on ? I felt—or rather fancied I felt—the machine sinking down to the lowest beds of the sea. Dreadful nightmares beset me ; I saw in these mysterious asylums a world of unknown animals, amongst which this submarine boat seemed to be of the same kind, living, moving, and formidable as they. Then my brain grew calmer, my imagination wandered into vague unconsciousness, and I soon fell into a deep sleep.

CHAPTER IX

NED LAND'S TEMPER

How long we slept I do not know ; but our sleep must have lasted long, for it rested us completely from our fatigues. I woke first. My companions had not moved, and were still stretched in their corner.

Hardly roused from my somewhat hard couch, I felt my brain freed, my mind clear. I then began an attentive

examination of our cell. Nothing was changed inside. The prison was still a prison—the prisoners, prisoners. However, the steward, during our sleep, had cleared the table. I breathed with difficulty. The heavy air seemed to oppress my lungs. Although the cell was large, we had evidently consumed a great part of the oxygen that it contained. Indeed, each man consumes, in one hour, the oxygen contained in more than 176 pints of air, and this air, charged (as then) with a nearly equal quantity of carbonic acid, becomes unbreathable.

It became necessary to renew the atmosphere of our prison, and no doubt the whole in the submarine boat. That gave rise to a question in my mind. How would the commander of this floating dwelling-place proceed? Would he obtain air by chemical means, in getting by heat the oxygen contained in chlorate of potash, and in absorbing carbonic acid by caustic potash? Or—a more convenient, economical, and consequently more probable alternative—would he be satisfied to rise and take breath at the surface of the water, like a whale, and so renew for twenty-four hours the atmospheric provision?

In fact, I was already obliged to increase my respirations to eke out of this cell the little oxygen it contained, when suddenly I was refreshed by a current of pure air, and perfumed with saline emanations. It was an invigorating sea breeze, charged with iodine. I opened my mouth wide, and my lungs saturated themselves with fresh particles.

At the same time I felt the boat rolling. The iron-plated monster had evidently just risen to the surface of the ocean to breathe, after the fashion of whales. I found out from that the mode of ventilating the boat.

When I had inhaled this air freely, I sought the conduits pipe, which conveyed to us the beneficial whiff, and I was not long in finding it. Above the door was a ventilator, through which volumes of fresh air renewed the impoverished atmosphere of the cell.

I was making my observations, when Ned and Conseil

awoke almost at the same time, under the influence of this reviving air. They rubbed their eyes, stretched themselves, and were on their feet in an instant.

"Did master sleep well?" asked Conseil, with his usual politeness.

"Very well, my brave boy. And you, Mr. Land?"

"Soundly, Professor. But, I don't know if I am right or not, there seems to be a sea breeze!"

A seaman could not be mistaken, and I told the Canadian all that had passed during his sleep.

"Good!" said he. "That accounts for those roarings we heard, when the supposed narwhal sighted the *Abraham Lincoln*."

"Quite so, Master Land; it was taking breath."

"Only, Mr. Aronnax, I have no idea what o'clock it is, unless it is dinner-time."

"Dinner-time! my good fellow? Say rather breakfast-time, for we certainly have begun another day."

"So," said Conseil, "we have slept twenty-four hours?"

"That is my opinion."

"I will not contradict you," replied Ned Land. "But, dinner or breakfast, the steward will be welcome, whichever he brings."

"Master Land, we must conform to the rules on board, and I suppose our appetites are in advance of the dinner-hour."

"That is just like you, friend Conseil," said Ned, impatiently. "You are never out of temper, always calm; you would return thanks before grace, and die of hunger rather than complain!"

Time was getting on, and we were fearfully hungry; and this time the steward did not appear. It was rather too long to leave us, if they really had good intentions towards us. Ned Land, tormented by the cravings of hunger, got still more angry; and, notwithstanding his promise, I dreaded an explosion when he found himself with one of the crew.

For two hours more Ned Land's temper increased ; he cried, he shouted, but in vain. The walls were deaf. There was no sound to be heard in the boat ; all was still as death. It did not move, for I should have felt the trembling motion of the hull under the influence of the screw. Plunged in the depths of the waters, it belonged no longer to earth : this silence was dreadful.

I felt terrified, Conseil was calm, Ned Land roared.

Just then a noise was heard outside. Steps sounded on the metal flags. The locks were turned, the door opened, and the steward appeared.

Before I could rush forward to stop him, the Canadian had thrown him down, and held him by the throat. The steward was choking under the grip of his powerful hand.

Conseil was already trying to unclasp the harpooner's hand from his half-suffocated victim, and I was going to fly to the rescue, when suddenly I was nailed to the spot by hearing these words in French :

" Be quiet, Master Land ; and you, Professor, will you be so good as to listen to me ? "

CHAPTER X

THE MAN OF THE SEAS

It was the commander of the vessel who thus spoke.

At these words, Ned Land rose suddenly. The steward, nearly strangled, tottered out on a sign from his master. But such was the power of the commander on board, that not a gesture betrayed the resentment which this man must have felt towards the Canadian. Conseil interested in spite of himself, I stupefied, awaited in silence the result of this scene.

The commander, leaning against the corner of a table with his arms folded, scanned us with profound attention.

Did he hesitate to speak ? Did he regret the words which he had just spoken in French ? One might almost think so.

After some moments of silence, which not one of us dreamed of breaking, "Gentlemen," said he, in a calm and penetrating voice, "I speak French, English, German, and Latin equally well. I could, therefore, have answered you at our first interview, but I wished to know you first, then to reflect. The story told by each one, entirely agreeing in the main points, convinced me of your identity. I know now that chance has brought before me M. Pierre Aronnax, Professor of Natural History at the Museum of Paris, entrusted with a scientific mission abroad, Conseil, his servant, and Ned Land, of Canadian origin, harpooner on board the frigate *Abraham Lincoln* of the navy of the United States of America."

I bowed assent. It was not a question that the commander put to me. Therefore there was no answer to be made. This man expressed himself with perfect ease, without any accent. His sentences were well turned, his words clear, and his fluency of speech remarkable. Yet, I did not recognise in him a fellow-countryman.

He continued the conversation in these terms :

"You have doubtless thought, sir, that I have delayed long in paying you this second visit. The reason is that, your identity recognised, I wished to weigh maturely what part to act towards you. I have hesitated much. Most annoying circumstances have brought you into the presence of a man who has broken all the ties of humanity. You have come to trouble my existence."

"Unintentionally !" said I.

"Unintentionally ?" replied the stranger, raising his voice a little. "Was it unintentionally that the *Abraham Lincoln* pursued me all over the seas ? Was it unintentionally that you took passage in this frigate ? Was it unintentionally that your cannon-balls rebounded off the plating of my vessel ? Was it unintentionally that Mr. Ned Land struck me with his harpoon ?"

I detected a restrained irritation in these words. But to these recriminations I had a very natural answer to make, and I made it.

"Sir," said I, "no doubt you are ignorant of the discussions which have taken place concerning you in America and Europe. You do not know that divers accidents, caused by collisions with your submarine machine, have excited public feeling in the two continents. I omit the theories without number by which it was sought to explain that of which you alone possess the secret. But you must understand that, in pursuing you over the high seas of the Pacific, the *Abraham Lincoln* believed itself to be chasing some powerful sea-monster, of which it was necessary to rid the ocean at any price."

A half-smile curled the lips of the commander : then, in a calmer tone :

"M. Aronnax," he replied, "dare you affirm that your frigate would not as soon have pursued and cannonaded a submarine boat as a monster ?"

This question embarrassed me, for certainly Captain Farragut might not have hesitated. He might have thought it his duty to destroy a contrivance of this kind, as he would a gigantic narwhal.

"You understand then, sir," continued the stranger, "that I have the right to treat you as enemies ?"

I answered nothing, purposely. For what good would it be to discuss such a proposition, when force could destroy the best arguments ?

"I have hesitated some time," continued the commander ; "nothing obliged me to show you hospitality. If I chose to separate myself from you, I should have no interest in seeing you again ; I could place you upon the deck of this vessel which has served you as a refuge, I could sink beneath the waters, and forget that you had ever existed. Would not that be my right ?"

"It might be the right of a savage," I answered, "but not that of a civilised man."

"Professor," replied the commander, quickly, "I am not what you call a civilised man ! I have done with society entirely, for reasons which I alone have the right of appreciating. I do not, therefore, obey its laws, and I desire you never to allude to them before me again !"

This was said plainly. A flash of anger and disdain kindled in the eyes of the Unknown, and I had a glimpse of a terrible past in the life of this man. Not only had he put himself beyond the pale of human laws, but he had made himself independent of them, free in the strictest acceptance of the word, quite beyond their reach ! Who then would dare to pursue him at the bottom of the sea, when, on its surface, he defied all attempts made against him ?

What vessel could resist the shock of his submarine monitor ? What cuirass, however thick, could withstand the blows of his spur ? No man could demand from him an account of his actions ; God, if he believed in one—his conscience, if he had one—were the sole judges to whom he was answerable.

These reflections crossed my mind rapidly, whilst the stranger personage was silent, absorbed, and as if wrapped up in himself. I regarded him with fear mingled with interest, as, doubtless, Œdipus regarded the Sphinx.

After rather a long silence, the commander resumed the conversation.

"I have hesitated," said he, "but I have thought that my interest might be reconciled with that pity to which every human being has a right. You will remain on board my vessel, since fate has cast you there. You will be free ; and, in exchange for this liberty, I shall only impose one single condition. Your word of honour to submit to it will suffice."

"Speak, sir," I answered. "I suppose this condition is one which a man of honour may accept ?"

"Yes, sir ; it is this : It is possible that certain events, unforeseen, may oblige me to consign you to your cabins for some hours or some days, as the case may be. As I desire

never to use violence, I expect from you, more than all the others, a passive obedience. In thus acting, I take all the responsibility : I acquit you entirely, for I make it an impossibility for you to see what ought not to be seen. Do you accept this condition ? ”

Then things took place on board which, to say the least, were singular, and which ought not to be seen by people who were not placed beyond the pale of social laws. Amongst the surprises which the future was preparing for me, this might not be the least.

“ We accept,” I answered ; “ only I will ask your permission, sir, to address one question to you—one only.”

“ Speak, sir.”

“ You said that we should be free on board.”

“ Entirely.”

“ I ask you, then, what you mean by this liberty ? ”

“ Just the liberty to go, to come, to see, to observe even all that passes here—save under rare circumstances—the liberty, in short, which we enjoy ourselves, my companions and I.”

It was evident that we did not understand one another.

“ Pardon me, sir,” I resumed, “ but this liberty is only what every prisoner has of pacing his prison. It cannot suffice us.”

“ It must suffice you, however.”

“ What ! we must renounce for ever seeing our country, our friends, our relations again ? ”

“ Yes, sir. But to renounce that unendurable worldly yoke which men believe to be liberty is not perhaps so painful as you think.”

“ Well,” exclaimed Ned Land, “ never will I give my word of honour not to try to escape.”

“ I did not ask you for your word of honour, Master Land,” answered the commander, coldly.

“ Sir,” I replied, beginning to get angry in spite of myself, “ you abuse your situation towards us ; it is cruelty.”

“ No, sir, it is clemency. You are my prisoners of war.

I keep you, when I could, by a word, plunge you into the depths of the ocean. You attacked me. You came to surprise a secret which no man in the world must penetrate—the secret of my whole existence. And you think that I am going to send you back to that world which must know me no more ? Never ! In retaining you, it is not you whom I guard—it is myself.”

These words indicated a resolution taken on the part of the commander, against which no arguments would prevail.

“ So, sir,” I rejoined, “ you give us simply the choice between life and death ? ”

“ Simply.”

“ My friends,” said I, “ to a question thus put, there is nothing to answer. But no word of honour binds us to the master of this vessel.”

“ None, sir,” answered the Unknown.

Then, in a gentler tone, he continued :

“ Now, permit me to finish what I have to say to you. I know you, M. Aronnax. You and your companions will not, perhaps, have so much to complain of in the chance which has bound you to my fate. You will find amongst the books which are my favourite study the work which you have published on ‘ the depths of the sea.’ I have often read it. You have carried out your work as far as terrestrial science permitted you. But you do not know all—you have not seen all. Let me tell you then, Professor, that you will not regret the time passed on board my vessel. You are going to visit the land of marvels.”

These words of the commander had a great effect upon me. I cannot deny it. My weak point was touched ; and I forgot, for a moment, that the contemplation of these sublime subjects was not worth the loss of liberty. Besides, I trusted to the future to decide this grave question. So I contented myself with saying :

“ By what name ought I to address you ? ”

“ Sir,” replied the commander, “ I am nothing to you

but Captain Nemo ; and you and your companions are nothing to me but the passengers of the *Nautilus*."

Captain Nemo called. A steward appeared. The captain gave him his orders in that strange language which I did not understand. Then, turning towards the Canadian and Conseil :

"A repast awaits you in your cabin," said he. "Be so good as to follow this man."

"And now, M. Aronnax, our breakfast is ready. Permit me to lead the way."

"I am at your service, captain."

I followed Captain Nemo ; and as soon as I had passed through the door, I found myself in a kind of passage lighted by electricity, similar to the waist of a ship. After we had proceeded a dozen yards, a second door opened before me.

I then entered a dining-room, decorated and furnished in severe taste. High oaken sideboards, inlaid with ebony, stood at the two extremities of the room, and upon their shelves glittered china, porcelain, and glass of inestimable value. The plate on the table sparkled in the rays which the luminous ceiling shed around, while the light was tempered and softened by exquisite paintings.

In the centre of the room was a table richly laid out. Captain Nemo indicated the place I was to occupy.

The breakfast consisted of a certain number of dishes, the contents of which were furnished by the sea alone ; and I was ignorant of the nature and mode of preparation of some of them. I acknowledged that they were good, but they had a peculiar flavour, which I easily became accustomed to. These different aliments appeared to me to be rich in phosphorus, and I thought they must have a marine origin.

Captain Nemo looked at me. I asked him no questions, but he guessed my thoughts, and answered of his own accord the questions which I was burning to address to him.

"The greater part of these dishes are unknown to you," he said to me. "However, you may partake of them without fear. They are wholesome and nourishing. For a long time I have renounced the food of the earth, and I am never ill now. My crew, who are healthy, are fed on the same food."

"So," said I, "all these eatables are the produce of the sea?"

"Yes, Professor, the sea supplies all my wants. Sometimes I cast my nets in tow, and I draw them in ready to break. Sometimes I hunt in the midst of this element, which appears to be inaccessible to man, and quarry the game which dwells in my submarine forests. My flocks, like those of Neptune's old shepherds, graze fearlessly in the immense prairies of the ocean. I have a vast property there, which I cultivate myself, and which is always sown by the hand of the Creator of all things."

"I can understand perfectly, sir, that your nets furnish excellent fish for your table; I can understand also that you hunt aquatic game in your submarine forests; but I cannot understand at all how a particle of meat, no matter how small, can figure in your bill of fare."

"This, which you believe to be meat, Professor, is nothing else than fillet of turtle. Here are also some dolphins' livers, which you take to be ragout of pork. My cook is a clever fellow, who excels in dressing these various products of the ocean. Taste all these dishes. Here is a preserve of sea-cucumber, which a Malay would declare to be unrivalled in the world; here is a cream, of which the milk has been furnished by the cetacea, and the sugar by the great fucus of the North Sea; and, lastly, permit me to offer you some preserve of anemones, which is equal to that of the most delicious fruits."

I tasted, more from curiosity than as a connoisseur, whilst Captain Nemo enchanted me with his extraordinary stories.

"You like the sea, Captain?"

"Yes ; I love it ! The sea is everything. It covers seven-tenths of the terrestrial globe. Its breath is pure and healthy. It is an immense desert, where man is never lonely, for he feels life stirring on all sides. The sea is only the embodiment of a supernatural and wonderful existence. It is nothing but love and emotion ; it is the ' Living Infinite,' as one of your poets has said. In fact, Professor, Nature manifests herself in it by her three kingdoms—mineral, vegetable, and animal. The sea is the vast reservoir of Nature. The globe began with sea, so to speak ; and who knows if it will not end with it ? In it is supreme tranquillity. The sea does not belong to despots. Upon its surface men can still exercise unjust laws, fight, tear one another to pieces, and be carried away with terrestrial horrors. But at thirty feet below its level, their reign ceases, their influence is quenched, and their power disappears. Ah ! sir, live—live in the bosom of the waters ! There only is independence ! There I recognise no masters ! There I am free ! "

Captain Nemo suddenly became silent in the midst of this enthusiasm, by which he was quite carried away. For a few moments he paced up and down, much agitated. Then he became more calm, regained his accustomed coldness of expression, and turning towards me :

"Now, Professor," said he, "if you wish to go over the *Nautilus*, I am at your service."

Captain Nemo rose. I followed him. A double door, contrived at the back of the dining-room, opened, and I entered a room equal in dimensions to that which I had just quitted.

It was a library. High pieces of furniture, of black violet ebony inlaid with brass, supported upon their wide shelves a great number of books uniformly bound. They followed the shape of the room, terminating at the lower part in huge divans, covered with brown leather, which were curved, to afford the greatest comfort. Light movable desks, made to slide in and out at will, allowed one to rest one's book

while reading. In the centre stood an immense table, covered with pamphlets, amongst which were some newspapers, already of old date. The electric light flooded everything ; it was shed from four unpolished globes half sunk in the volutes of the ceiling. I looked with real admiration at this room, so ingeniously fitted up, and I could scarcely believe my eyes.

" Captain Nemo," said I to my host, who had just thrown himself on one of the divans, " this is a library which would do honour to more than one of the continental palaces, and I am absolutely astounded when I consider that it can follow you to the bottom of the seas."

" Where could one find greater solitude or silence, Professor?" replied Captain Nemo. " Did your study in the Museum afford you such perfect quiet ? "

" No, sir ; and I must confess that it is a very poor one after yours. You must have six or seven thousand volumes here."

" Twelve thousand, M. Aronnax. These are the only ties which bind me to the earth. But I had done with the world on the day when my *Nautilus* plunged for the first time beneath the waters. That day I bought my last volumes, my last pamphlets, my last papers, and from that time I wish to think that men no longer think or write. These books, Professor, are at your service besides, and you can make use of them freely."

I thanked Captain Nemo, and went up to the shelves of the library. Works on science, morals, and literature abounded in every language ; but I did not see one single work on political economy ; that subject appeared to be strictly proscribed. Strange to say, all these books were irregularly arranged, in whatever language they were written ; and this medley proved that the Captain of the *Nautilus* must have read indiscriminately the books which he took up by chance.

" Sir," said I to the Captain, " I thank you for having placed this library at my disposal. It contains treasures of science, and I shall profit by them."

"This room is not only a library," said Captain Nemo, "it is also a smoking-room."

"A smoking-room!" I cried. "Then one may smoke on board?"

"Certainly."

"Then, sir, I am forced to believe that you have kept up a communication with Havannah."

"Not any," answered the Captain. "Accept this cigar, M. Aronnax; and, though it does not come from Havannah, you will be pleased with it, if you are a connoisseur."

I took the cigar which was offered me; its shape recalled the London ones, but it seemed to be made of leaves of gold. I lighted it at a little brazier, which was supported upon an elegant bronze stem, and drew the first whiffs with the delight of a lover of smoking who has not smoked for two days.

"It is excellent, but it is not tobacco."

"No!" answered the Captain, "this tobacco comes neither from Havannah nor from the East. It is a kind of sea-weed, rich in nicotine, with which the sea provides me, but somewhat sparingly."

At that moment Captain Nemo opened a door which stood opposite to that by which I had entered the library, and I passed into an immense drawing-room splendidly lighted.

It was a vast, four-sided room, thirty feet long, eighteen wide, and fifteen high. A luminous ceiling, decorated with light arabesques, shed a soft clear light over all the marvels accumulated in this museum. For it was in fact a museum, in which an intelligent and prodigal hand had gathered all the treasures of nature and art, with the artistic confusion which distinguishes a painter's studio.

Thirty first-rate pictures, uniformly framed, separated by bright drapery, ornamented the walls, which were hung with tapestry of severe design. I saw works of great value, the greater part of which I had admired in the special collections of Europe, and in the exhibitions of paintings.

Some admirable statues in marble and bronze, after the
Cv

finest antique models, stood upon pedestals in the corners of this magnificent museum. Amazement, as the Captain of the *Nautilus* had predicted, had already begun to take possession of me.

"Professor," said this strange man, "you must excuse the unceremonious way in which I receive you, and the disorder of this room."

"Sir," I answered, "without seeking to know who you are, I recognise in you an artist."

"An amateur, nothing more, sir. Formerly I loved to collect these beautiful works created by the hand of man. I sought them greedily, and ferreted them out indefatigably, and I have been able to bring together some objects of great value. These are my last souvenirs of that world which is dead to me. In my eyes, your modern artists are already old ; they have two or three thousand years of existence ; I confound them in my own mind. Masters have no age."

Under elegant glass cases, fixed by copper rivets, were classed and labelled the most precious productions of the sea which had ever been presented to the eye of a naturalist. My delight as a professor may be conceived.

Apart, in separate compartments, were spread out chaplets of pearls of the greatest beauty, which reflected the electric light in little sparks of fire ; pink pearls, torn from the pinna-marina of the Red Sea ; green pearls, yellow, blue, and black pearls, the curious productions of the divers molluscs of every ocean, and certain mussels of the watercourses of the North ; lastly, several specimens of inestimable value. Some of these pearls were larger than a pigeon's egg, and were worth millions.

Therefore, to estimate the value of this collection was simply impossible. Captain Nemo must have expended millions in the acquirement of these various specimens, and I was thinking what source he could have drawn from, to have been able thus to gratify his fancy for collecting, when I was interrupted by these words :

"You are examining my shells, Professor? Unquestionably they must be interesting to a naturalist; but for me they have a far greater charm, for I have collected them all with my own hand, and there is not a sea on the face of the globe which has escaped my researches."

"I can understand, Captain, the delight of wandering about in the midst of such riches. You are one of those who have collected their treasures themselves. No museum in Europe possesses such a collection of the produce of the ocean. But if I exhaust all my admiration upon it, I shall have none left for the vessel which carries it. I do not wish to pry into your secrets: but I must confess that this *Nautilus*, with the motive power which is confined in it, the contrivances which enable it to be worked, the powerful agent which propels it, all excite my curiosity to the highest pitch. I see suspended on the walls of this room instruments of whose use I am ignorant."

"You will find these same instruments in my own room, Professor, where I shall have much pleasure in explaining their use to you. But first come and inspect the cabin which is set apart for your own use. You must see how you will be accommodated on board the *Nautilus*."

I followed Captain Nemo, who, by one of the doors opening from each panel of the drawing-room, regained the waist. He conducted me towards the bow, and there I found, not a cabin, but an elegant room, with a bed, dressing-table, and several other pieces of excellent furniture.

I could only thank my host.

"Your room adjoins mine," said he, opening a door, "and mine opens into the drawing-room that we have just quitted."

I entered the Captain's room: it had a severe, almost a monkish, aspect. A small iron bedstead, a table, some articles for the toilet; the whole lighted by a skylight. No comforts, the strictest necessities only.

Captain Nemo pointed to a seat.

“Be so good as to sit down,” he said. I seated myself, and he began thus :

CHAPTER XI

ALL BY ELECTRICITY

“Sir,” said Captain Nemo, showing me the instruments hanging on the walls of his room, “here are the contrivances required for the navigation of the *Nautilus*. Here, as in the drawing-room, I have them always under my eyes, and they indicate my position and exact direction in the middle of the ocean. Some are known to you, such as the thermometer, which gives the internal temperature of the *Nautilus* ; the barometer, which indicates the weight of the air and foretells the changes of the weather ; the hygrometer, which marks the dryness of the atmosphere ; the storm-glass, the contents of which, by decomposing, announce the approach of tempests ; the compass, which guides my course ; the sextant, which shows the latitude by the altitude of the sun ; chronometers, by which I calculate the longitude ; and glasses for day and night, which I use to examine the points of the horizon, when the *Nautilus* rises to the surface of the waves.”

“These are the usual nautical instruments,” I replied, “and I know the use of them. But these others, no doubt, answer to the particular requirements of the *Nautilus*. This dial with the movable needle is a manometer, is it not ? ”

“It is actually a manometer. But by communication with the water, whose external pressure it indicates, it gives our depth at the same time.”

“And these other instruments, the use of which I cannot guess ? ”

“Here, Professor, I ought to give you some explanations. Will you be kind enough to listen to me ? ”

He was silent for a few moments, then he said :

" There is a powerful agent, obedient, rapid, easy, which conforms to every use, and reigns supreme on board my vessel. Everything is done by means of it. It lights it, warms it, and is the soul of my mechanical apparatus. This agent is electricity."

" Electricity ? " I cried in surprise.

" Yes, sir."

" Nevertheless, Captain, you possess an extreme rapidity of movement, which does not agree well with the power of electricity. Until now, its dynamic force has remained under restraint, and has only been able to produce a small amount of power."

" Professor," said Captain Nemo, " my electricity is not everybody's. You know what sea-water is composed of. In a thousand grammes are found $96\frac{1}{2}$ per cent. of water, and about $2\frac{2}{3}$ per cent. of chloride of sodium ; then, in a smaller quantity, chlorides of magnesium and of potassium, bromide of magnesium, sulphate of magnesia, sulphate and carbonate of lime. You see, then, that chloride of sodium forms a large part of it. So it is this sodium that I extract from the sea-water, and of which I compose my ingredients. I owe all to the ocean ; it produces electricity, and electricity gives heat, light, motion, and, in a word, life to the *Nautilus*."

" But not the air you breathe ? "

" Oh ! I could manufacture the air necessary for my consumption, but it is useless, because I go up to the surface of the water when I please. However, if electricity does not furnish me with air to breathe, it works at least the powerful pumps that are stored in spacious reservoirs, and which enable me to prolong at need, and as long as I will, my stay in the depths of the sea. It gives a uniform and unintermittent light, which the sun does not. Now look at this clock ; it is electrical, and goes with a regularity that defies the best chronometers. I have divided it into twenty-four hours, like the Italian clocks, because for me there is

neither night nor day, sun nor moon, but only that factitious light that I take with me to the bottom of the sea. Look ! just now, it is ten o'clock in the morning."

" Exactly."

" Another application of electricity. This dial hanging in front of us indicates the speed of the *Nautilus*. An electric thread puts it in communication with the screw, and the needle indicates the real speed. Look ! now we are spinning along with a uniform speed of fifteen miles an hour."

" It is marvellous ! And I see, Captain, you were right to make use of this agent that takes the place of wind, water, and steam."

" We have not finished, M. Aronnax," said Captain Nemo, rising. " If you will follow me, we will examine the stern of the *Nautilus*."

Really, I knew already the anterior part of this submarine boat, of which this is the exact division, starting from the ship's head : the dining-room, five yards long, separated from the library by a water-tight partition ; the library, five yards long ; the large drawing-room, ten yards long, separated from the Captain's room by a second water-tight partition ; the said room, five yards in length ; mine, two and a half yards ; and, lastly, a reservoir of air, seven and a half yards, that extended to the bows. Total length thirty-five yards, or one hundred and five feet. The partitions had doors that were shut hermetically by means of india-rubber instruments, and they ensured the safety of the *Nautilus* in case of a leak.

I followed Captain Nemo through the waist, and arrived at the centre of the boat. There was a sort of well that opened between two partitions. An iron ladder, fastened with an iron hook to the partition, led to the upper end. I asked the Captain what the ladder was used for.

" It leads to the small boat," he said.

" What ! have you a boat ? " I exclaimed, in surprise.

" Of course ; an excellent vessel, light and insubmersible, that serves either as a fishing or as a pleasure boat."

"But then, when you wish to embark, you are obliged to come to the surface of the water?"

"Not at all. This boat is attached to the upper part of the hull of the *Nautilus*, and occupies a cavity made for it. It is decked, quite water-tight, and held together by solid bolts. This ladder leads to a man-hole made in the hull of the *Nautilus*, that corresponds with a similar hole made in the side of the boat. By this double opening I get into the small vessel. They shut the one belonging to the *Nautilus*; I shut the other by means of screw pressure. I undo the bolts, and the little boat goes up to the surface of the sea with prodigious rapidity. I then open the panel of the bridge, carefully shut till then; I mast it, hoist my sail, take my oars, and I'm off."

"But how do you get back on board?"

"I do not come back, M. Arronax; the *Nautilus* comes to me."

"By your orders?"

"By my orders. An electric thread connects us. I telegraph to it, and that is enough."

"Really," I said, astonished at these marvels, "nothing can be more simple."

After having passed by the cage of the staircase that led to the platform, I saw a cabin six feet long, in which Conseil and Ned Land, enchanted with their repast, were devouring it with avidity. Then a door opened into a kitchen nine feet long, situated between the large store-rooms. There electricity, better than gas itself, did all the cooking. The streams under the furnaces gave out to the sponges of platina a heat which was regularly kept up and distributed. They also heated a distilling apparatus, which, by evaporation, furnished excellent drinkable water. Near this kitchen was a bathroom comfortably furnished, with hot and cold water taps.

Next to the kitchen was the berth-room of the vessel, sixteen feet long. But the door was shut, and I could not see the management of it, which might have given me an

idea of the number of men employed on board the *Nautilus*.

At the bottom was a fourth partition that separated this office from the engine-room. A door opened, and I found myself in the compartment where Captain Nemo—certainly an engineer of a very high order—had arranged his locomotive machinery. This engine-room, clearly lighted, did not measure less than sixty-five feet in length. It was divided into two parts ; the first contained the materials for producing electricity, and the second the machinery that connected it with the screw. I examined it with great interest, in order to understand the machinery of the *Nautilus*.

“ You see,” said the Captain, “ I use Bunsen’s contrivances, not Ruhmkorff’s. Those would not have been powerful enough. Bunsen’s are fewer in number, but strong and large, which experience proves to be the best. The electricity produced passes forward, where it works, by electromagnets of great size, on a system of levers and cog-wheels that transmit the movement to the axle of the screw. This one, the diameter of which is nineteen feet, and the thread twenty-three feet, performs about 120 revolutions in a second.”

“ And you get then ? ”

“ A speed of fifty miles an hour.”

“ I have seen the *Nautilus* manœuvre before the *Abraham Lincoln*, and I have my own ideas as to its speed. But this is not enough. We must see where we go. We must be able to direct it to the right, to the left, above, below. How do you get to the great depths, where you find an increasing resistance, which is rated by hundreds of atmospheres ? How do you return to the surface of the ocean ? And how do you maintain yourselves in the requisite medium ? Am I asking too much ? ”

“ Not at all, Professor,” replied the Captain, with some hesitation ; “ since you may never leave this submarine boat. Come into the saloon, it is our usual study, and there you will learn all you want to know about the *Nautilus*.”

CHAPTER XII

SOME FIGURES

A moment after we were seated on a divan in the saloon smoking. The Captain showed me a sketch that gave the plan, section, and elevation of the *Nautilus*. Then he began his description in these words :

“ Here, M. Aronnax, are the several dimensions of the boat you are in. It is an elongated cylinder with conical ends. It is very like a cigar in shape, a shape already adopted in London in several constructions of the same sort. The length of this cylinder, from stem to stern, is exactly 232 feet, and its maximum breadth is twenty-six feet. It is not built quite like your long-voyage steamers, but its lines are sufficiently long, and its curves prolonged enough, to allow the water to slide off easily, and oppose no obstacle to its passage. These two dimensions enable you to obtain by a simple calculation the surface and cubic contents of the *Nautilus*. Its area measures 6,032 feet ; and its contents about 1,500 cubic yards ; that is to say, when completely immersed it displaces 50,000 feet of water, or weighs 1,500 tons.

“ When I made the plans for this submarine vessel, I meant that nine-tenths should be submerged : consequently it ought only to displace nine-tenths of its bulk, that is to say, only to weigh that number of tons. I ought not, therefore, to have exceeded that weight, constructing it on the aforesaid dimensions.

“ The *Nautilus* is composed of two hulls, one inside, the other outside, joined by T-shaped irons, which render it very strong. Indeed, owing to this cellular arrangement it resists like a block, as if it were solid. Its sides cannot yield ; it coheres spontaneously, and not by the closeness of its rivets ; and its perfect union of the materials enables it to defy the roughest seas.

“ These two hulls are composed of steel plates, whose

density is from .7 to .8 that of water. The first is not less than two inches and a half thick and weighs 394 tons. The second envelope, the keel, twenty inches high and ten thick, weighs only sixty-two tons. The engine, the ballast, the several accessories and apparatus appendages, the partitions and bulkheads, weigh 961.62 tons. Do you follow all this ? ”

“ I do.”

“ Then, when the *Nautilus* is afloat under these circumstances, one-tenth is out of the water. Now, if I have made reservoirs of a size equal to this tenth, or capable of holding 150 tons, and if I fill them with water, the boat, weighing then 1,507 tons, will be completely immersed. That would happen, Professor. These reservoirs are in the lower part of the *Nautilus*. I turn on taps and they fill, and the vessel sinks that had just been level with the surface.”

“ Well, Captain, but now we come to the real difficulty. I can understand your rising to the surface ; but, diving below the surface, does not your submarine contrivance encounter a pressure, and consequently undergo an upward thrust of one atmosphere for every thirty feet of water, just about fifteen pounds per square inch ? ” .

“ Just so, sir.”

“ Then, unless you quite fill the *Nautilus*, I do not see how you can draw it down to those depths.”

“ Professor, you must not confound statics with dynamics or you will be exposed to grave errors. There is very little labour spent in attaining the lower regions of the ocean, for all bodies have a tendency to sink. When I wanted to find out the necessary increase of weight required to sink the *Nautilus*, I had only to calculate the reduction of volume that sea-water acquires according to the depth.”

“ That is evident.”

“ Now, if water is not absolutely incompressible, it is at least capable of very slight compression. Indeed, after the most recent calculations this reduction is only .000436 of an atmosphere for each thirty feet of depth. If we want to

sink 3,000 feet, I should keep account of the reduction of bulk under a pressure equal to that of a column of water of a thousand feet. The calculation is easily verified. Now, I have supplementary reservoirs capable of holding a hundred tons. Therefore I can sink to a considerable depth. When I wish to rise to the level of the sea, I only let off the water, and empty all the reservoirs if I want the *Nautilus* to emerge from the tenth part of her total capacity."

I had nothing to object to these reasonings.

"I admit your calculations, Captain," I replied ; "I should be wrong to dispute them since daily experience confirms them ; but I foresee a real difficulty in the way."

"What, sir ?"

"When you are about 1,000 feet deep, the walls of the *Nautilus* bear a pressure of 100 atmospheres. If, then, just now you were to empty the supplementary reservoirs, to lighten the vessel, and to go up to the surface, the pumps must overcome the pressure of 100 atmospheres, which is 1,500 lb. per square inch. From that a power——"

"That electricity alone can give," said the Captain, hastily. "I repeat, sir, that the dynamic power of my engines is almost infinite. The pumps of the *Nautilus* have an enormous power, as you must have observed when their jets of water burst like a torrent upon the *Abraham Lincoln*. Besides, I use subsidiary reservoirs only to attain a mean depth of 750 to 1,000 fathoms, and that with a view of managing my machines. Also, when I have a mind to visit the depths of the ocean five or six miles below the surface, I make use of slower but not less infallible means."

"What are they, Captain ?"

"That involves my telling you how the *Nautilus* is worked."

"I am impatient to learn."

"To steer this boat to starboard or port, to turn, in a word, following a horizontal plan, I use an ordinary rudder fixed on the back of the stern-post, and with one wheel and some tackle to steer by. But I can also make the *Nautilus*

rise and sink, and sink and rise, by a vertical movement by means of two inclined planes fastened to its sides, opposite the centre of flotation, planes that move in every direction, and that are worked by powerful levers from the interior. If the planes are kept parallel with the boat, it moves horizontally. If slanted, the *Nautilus*, according to this inclination, and under the influence of the screw, either sinks diagonally or rises diagonally as it suits me. And even if I wish to rise more quickly to the surface, I ship the screw, and the pressure of the water causes the *Nautilus* to rise vertically like a balloon filled with hydrogen."

"Bravo, Captain ! But how can the steersman follow the route in the middle of the waters ? "

"The steersman is placed in a glazed box, that is raised above the hull of the *Nautilus*, and furnished with lenses."

"Are these lenses capable of resisting such pressure ? "

"Perfectly. Glass, which breaks at a blow, is, nevertheless, capable of offering considerable resistance. During some experiments of fishing by electric light in 1864 in the Northern Seas, we saw plates less than a third of an inch thick resist a pressure of sixteen atmospheres. Now, the glass that I use is not less than thirty times thicker."

"Granted. But, after all, in order to see, the light must exceed the darkness, and in the midst of the darkness in the water, how can you see ? "

"Behind the steersman's cage is placed a powerful electric reflector, the rays from which light up the sea for half a mile in front."

"Ah ! bravo, bravo, Captain ! Now I can account for this phosphorescence in the supposed narwhal that puzzled us so. I now ask you if the boarding of the *Nautilus* and of the *Scotia*, that has made such a noise, has been the result of a chance *rencontre* ? "

"Quite accidental, sir. I was sailing only one fathom below the surface of the water when the shock came. It had no bad result."

"None, sir. But now, about your *rencontre* with the *Abraham Lincoln*?"

"Professor, I am sorry for one of the best vessels in the American navy; but they attacked me, and I was bound to defend myself. I contented myself, however, with putting the frigate *hors de combat*; she will not have any difficulty in getting repaired at the next port."

"Ah, Commander! your *Nautilus* is certainly a marvellous boat."

"Yes, Professor; and I love it as if it were part of myself. If danger threatens one of your vessels on the ocean, the first impression is the feeling of an abyss above and below. On the *Nautilus* men's hearts never fail them. No defects to be afraid of, for the double shell is as firm as iron; no rigging to attend to; no sails for the wind to carry away; no boilers to burst; no fire to fear, for the vessel is made of iron, not of wood; no coal to run short, for electricity is the only mechanical agent; no collision to fear, for it alone swims in deep water; no tempest to brave, for when it dives below the water it reaches absolute tranquillity. There, sir! that is the perfection of vessels! And if it is true that the engineer has more confidence in the vessel than the builder, and the builder than the captain himself, you understand the trust I repose in my *Nautilus*; for I am at once captain, builder, and engineer."

"But how could you construct this wonderful *Nautilus* in secret?"

"Each separate portion, M. Aronnax, was brought from different parts of the globe."

"But these parts had to be put together and arranged?"

"Professor, I had set up my workshops upon a desert island in the ocean. There my workmen, that is to say, the brave men that I instructed and educated, and myself have put together our *Nautilus*. Then, when the work was finished, fire destroyed all trace of our proceedings on this island, that I could have jumped over if I had liked."

"Then the cost of this vessel is great?"

"M. Aronnax, an iron vessel costs £45 per ton. Now the *Nautilus* weighed 1,500. It came therefore to £67,500, and £80,000 more for fitting it up, and about £200,000, with the works of art and the collections it contains."

"One last question, Captain Nemo."

"Ask it, Professor."

"You are rich?"

"Immensely rich, sir; and I could, without missing it, pay the national debt of France."

I stared at the singular person who spoke thus. Was he playing upon my credulity? The future would decide that.

CHAPTER XIII

THE BLACK RIVER

The portion of the terrestrial globe which is covered by water is estimated at upwards of eighty millions of acres. This fluid mass comprises two billions two hundred and fifty millions of cubic miles, forming a spherical body of a diameter of sixty leagues, the weight of which would be three quintillions of tons. To comprehend the meaning of these figures, it is necessary to observe that a quintillion is to a billion as a billion is to unity; in other words, there are as many billions in a quintillion as there are units in a billion. This mass of fluid is equal to about the quantity of water which would be discharged by all the rivers of the earth in forty thousand years.

During the geological epochs the ocean originally prevailed everywhere. Then by degrees, in the silurian period, the tops of the mountains began to appear, the islands emerged, then disappeared in partial deluges, reappeared, became settled, formed continents, till at length the earth became geographically arranged, as we see in the present day. The solid had wrested from the liquid thirty-seven million six hundred and fifty-seven square miles, equal to twelve billions nine hundred and sixty millions of acres.

The shape of continents allows us to divide the waters into five great portions : the Arctic or Frozen Ocean, the Antarctic or Frozen Ocean, the Indian, the Atlantic, and the Pacific Oceans.

The Pacific Ocean extends from north to south between the two Polar Circles, and from east to west between Asia and America, over an extent of 145 degrees of longitude. It is the quietest of seas ; its currents are broad and slow, it has medium tides, and abundant rain. Such was the ocean that my fate destined me first to travel over under these strange conditions.

“ Sir,” said Captain Nemo, “ we will, if you please, take our bearings and fix the starting-point of this voyage. It is a quarter to twelve ; I will go up again to the surface.”

The Captain pressed an electric clock three times. The pumps began to drive the water from the tanks ; the needle of the manometer marked by a different pressure the ascent of the *Nautilus*, then it stopped.

“ We have arrived,” said the Captain.

I went to the central staircase which opened on to the platform, clambered up the iron steps, and found myself on the upper part of the *Nautilus*.

The platform was only three feet out of water. The front and back of the *Nautilus* was of that spindle-shape which caused it justly to be compared to a cigar. I noticed that its iron plates, slightly overlaying each other, resembled the shell which clothes the bodies of our large terrestrial reptiles. It explained to me how natural it was, in spite of all glasses, that this boat should have been taken for a marine animal.

Toward the middle of the platform the longboat, half buried in the hull of the vessel, formed a slight excrescence. Fore and aft rose two cages of medium height with inclined sides, and partly closed by thick lenticular glasses ; one destined for the steersman who directed the *Nautilus*, the other containing a brilliant lantern to give light on the road.

The sea was beautiful, the sky pure. Scarcely could the long vehicle feel the broad undulations of the ocean. A

light breeze from the east rippled the surface of the waters. The horizon, free from fog, made observation easy. Nothing was in sight. Not a quicksand, not an island. A vast desert.

Captain Nemo, by the help of his sextant, took the altitude of the sun, which ought also to give the latitude. He waited for some moments till its disc touched the horizon. Whilst taking observations not a muscle moved, the instrument could not have been more motionless in a hand of marble.

“Twelve o’clock, sir,” said he. “When you like——”

I cast a last look upon the sea, slightly yellowed by the Japanese coast, and descended to the saloon.

“And now, sir, I leave you to your studies,” added the Captain; “our course is E.N.E., our depth is twenty-six fathoms. Here are maps on a large scale by which you may follow it. The saloon is at your disposal, and, with your permission, I will retire.” Captain Nemo bowed, and I remained alone, lost in thoughts all bearing on the commander of the *Nautilus*.

For a whole hour was I deep in these reflections, seeking to pierce this mystery so interesting to me. Then my eyes fell upon the vast planisphere spread upon the table, and I placed my finger on the very spot where the given latitude and longitude crossed.

The sea has its large rivers like the continents. They are special currents known by their temperature and their colour. The most remarkable of these is known by the name of the Gulf Stream. Science has decided on the globe the direction of five principal currents: one in the North Atlantic, a second in the South, a third in the North Pacific, a fourth in the South, and a fifth in the Southern Indian Ocean. It is even probable that a sixth current existed at one time or another in the Northern Indian Ocean, when the Caspian and Aral Seas formed but one vast sheet of water.

At this point indicated on the planisphere one of these currents was rolling, the Kuro-Scivo of the Japanese, the

.

Black River, which, leaving the Gulf of Bengal, where it is warmed by the perpendicular rays of a tropical sun, crosses the Straits of Malacca along the coast of Asia, turns into the North Pacific to the Aleutian Islands, carrying with it trunks of camphor-trees and other indigenous productions, and edging the waves of the ocean with the pure indigo of its warm water. It was this current that the *Nautilus* was to follow. I followed it with my eye ; saw it lose itself in the vastness of the Pacific, and felt myself drawn with it, when Ned Land and Conseil appeared at the door of the saloon.

My two brave companions remained petrified at the sight of the wonders spread before them.

"Where are we, where are we ?" exclaimed the Canadian. "In the museum at Quebec ?"

"My friends," I answered, making a sign for them to enter, "you are not in Canada, but on board the *Nautilus*, fifty yards below the level of the sea."

"But, M. Aronnax," said Ned Land, "can you tell me how many men there are on board ? Ten, twenty, fifty, a hundred ?"

"I cannot answer you, Mr. Land ; it is better to abandon for a time all idea of seizing the *Nautilus* or escaping from it. This ship is a masterpiece of modern industry, and I should be sorry not to have seen it. Many people would accept the situation forced upon us, if only to move amongst such wonders. So be quiet and let us try and see what passes around us."

"See !" exclaimed the harpooner, "but we can see nothing in this iron prison ! We are walking—we are sailing—blindly."

Ned Land had scarcely pronounced these words when all was suddenly darkness. The luminous ceiling was gone, and so rapidly that my eyes received a painful impression.

We remained mute, not stirring, and not knowing what surprise awaited us, whether agreeable or disagreeable. A sliding noise was heard : one would have said that panels were working at the sides of the *Nautilus*.

“ It is the end of the end ! ” said Ned Land.

Suddenly light broke at each side of the saloon, through two oblong openings. The liquid mass appeared vividly lit up by the electric gleam. Two crystal plates separated us from the sea. At first I trembled at the thought that this frail partition might break, but strong bands of copper bound them, giving an almost infinite power of resistance.

The sea was distinctly visible for a mile all round the *Nautilus*. What a spectacle ! What pen can describe it ? Who could paint the effects of the light through those transparent sheets of water, and the softness of the successive gradations from the lower to the superior strata of the ocean ?

We know the transparency of the sea and that its clearness is far beyond that of rock-water. The mineral and organic substances which it holds in suspension heightens its transparency. In certain parts of the ocean at the Antilles, under seventy-five fathoms of water, can be seen with surprising clearness a bed of sand. The penetrating power of the solar rays does not seem to cease for a depth of one hundred and fifty fathoms. But in this middle fluid travelled over by the *Nautilus*, the electric brightness was produced even in the bosom of the waves. It was no longer luminous water, but liquid light.

On each side a window opened into this unexplored abyss. The obscurity of the saloon showed to advantage the brightness outside, and we looked out as if this pure crystal had been the glass of an immense aquarium.

“ You wished to see, friend Ned ; well, you see now.”

“ Curious ! curious ! ” muttered the Canadian, who, forgetting his ill-temper, seemed to submit to some irresistible attraction ; “ and one would come further than this to admire such a sight ! ”

“ Ah ! ” thought I to myself, “ I understand the life of this man ; he has made a world apart for himself, in which he treasures all his greatest wonders.”

For two whole hours an aquatic army escorted the

Nautilus. During their games, their bounds, while rivalling each other in beauty, brightness, and velocity, I distinguished the green labre ; the banded mullet, marked by a double line of black ; the round-tailed goby, of a white colour, with violet spots on the back ; the Japanese scombrus, a beautiful mackerel of these seas, with a blue body and silvery head ; the brilliant azurors, whose name alone defies description ; some banded spares, with variegated fins of blue and yellow ; the woodcocks of the seas, some specimens of which attain a yard in length ; Japanese salamanders, spider lampreys, serpents six feet long, with eyes small and lively, and a huge mouth bristling with teeth ; with many other species.

Our imagination was kept at its height, interjections followed quickly on each other. Ned named the fish, and Conseil classed them. I was in ecstasies with the vivacity of their movements and the beauty of their forms. Never had it been given to me to surprise these animals, alive and at liberty, in their natural element. I will not mention all the varieties which passed before my dazzled eyes, all the collection of the seas of China and Japan. These fish, more numerous than the birds of the air, came, attracted, no doubt, by the brilliant focus of the electric light.

Suddenly there was daylight in the saloon, the iron panels closed again, and the enchanting vision disappeared. But for a long time I dreamt on, till my eyes fell on the instruments hanging on the partition. The compass still showed the course to be E.N.E., the manometer indicated a pressure of five atmospheres, equivalent to a depth of twenty-five fathoms, and the electric log gave a speed of fifteen miles an hour. I expected Captain Nemo, but he did not appear. The clock marked the hour of five.

Ned Land and Conseil returned to their cabin, and I retired to my chamber. My dinner was ready. It was composed of turtle soup made of the most delicate hawksbills, of a surmullet served with puff paste (the liver of which, prepared by itself, was most delicious), and fillets

of the emperor-holocanthus, the savour of which seemed to me superior even to salmon.

I passed the evening reading, writing, and thinking. Then sleep overpowered me, and I stretched myself on my couch of zostera, and slept profoundly, whilst the *Nautilus* was gliding rapidly through the current of the Black River.

CHAPTER XIV

A NOTE OF INVITATION

THE next day was the 9th of November. I awoke after a long sleep of twelve hours. Conseil came, according to custom, to know "how I had passed the night," and to offer his services. He had left his friend the Canadian sleeping like a man who had never done anything else all his life. I let the worthy fellow chatter as he pleased, without caring to answer him. I was preoccupied by the absence of the Captain during our sitting of the day before, and hoping to see him to-day.

As soon as I was dressed I went into the saloon. It was deserted. I plunged into the study of the shell treasures hidden behind the glasses.

The whole day passed without my being honoured by a visit from Captain Nemo. The panels of the saloon did not open. Perhaps they did not wish us to tire of these beautiful things.

The course of the *Nautilus* was E.N.E., her speed twelve knots, the depth below the surface between twenty-five and thirty fathoms.

The next day, 10th of November, the same desertion, the same solitude. I did not see one of the ship's crew : Ned and Conseil spent the greater part of the day with me. They were astonished at the puzzling absence of the Captain. Was this singular man ill?—had he altered his intentions with regard to us?

After all, as Conseil said, we enjoyed perfect liberty, we

were delicately and abundantly fed. Our host kept to his terms of the treaty. We could not complain, and, indeed, the singularity of our fate reserved such wonderful compensation for us that we had no right to accuse it as yet.

That day I commenced the journal of these adventures which has enabled me to relate them with more scrupulous exactitude and minute detail.

11th November, early in the morning. The fresh air spreading over the interior of the *Nautilus* told me that we had come to the surface of the ocean to renew our supply of oxygen. I directed my steps to the central staircase, and mounted the platform.

It was six o'clock, the weather was cloudy, the sea grey, but calm. Scarcely a billow. Captain Nemo, whom I hoped to meet, would he be there? I saw no one but the steersman imprisoned in his glass cage. Seated upon the projection formed by the hull of the pinnace, I inhaled the salt breeze with delight.

By degrees the fog disappeared under the action of the sun's rays, the radiant orb rose from behind the eastern horizon. The sea flamed under its glance like a train of gunpowder. The clouds scattered in the heights were coloured with lively tints of beautiful shades, and numerous "mare's tails," which betokened wind for that day. But what was wind to this *Nautilus*, which tempests could not frighten!

I was admiring this joyous rising of the sun, so gay, and so life-giving, when I heard steps approaching the platform. I was prepared to salute Captain Nemo, but it was his second (whom I had already seen on the Captain's first visit) who appeared. He advanced on the platform, not seeming to see me. With his powerful glass to his eye, he scanned every point of the horizon with great attention. This examination over, he approached the panel and pronounced a sentence in exactly these terms. I have remembered it, for every morning it was repeated under exactly the same conditions. It was thus worded:

"Nautron respoc lorni virch."

What it meant I could not say.

These words pronounced, the second descended. I thought that the *Nautilus* was about to return to its submarine navigation. I regained the panel and returned to my chamber.

Five days sped thus, without any change in our situation. Every morning I mounted the platform. The same phrase was pronounced by the same individual. But Captain Nemo did not appear.

I had made up my mind that I should never see him again, when, on the 16th November, on returning to my room with Ned and Conseil, I found upon my table a note addressed to me. I opened it impatiently. It was written in a bold, clear hand, the characters rather pointed, recalling the German type. The note was worded as follows :

"TO PROFESSOR ARONNAX,

"On board the *Nautilus*.

16th of November, 1867.

"Captain Nemo invites Professor Aronnax to a hunting-party, which will take place to-morrow morning in the forests of the Island of Crespo. He hopes that nothing will prevent the Professor from being present, and he will with pleasure see him joined by his companions.

"CAPTAIN NEMO,

"Commander of the *Nautilus*."

"A hunt !" exclaimed Ned.

"And in the forests of the Island of Crespo !" added Conseil.

"Oh ! then the gentleman is going on *terra firma* ?" replied Ned Land.

"That seems to me to be clearly indicated," said I, reading the letter once more.

"Well, we must accept," said the Canadian. "But once

more on dry ground, we shall know what to do. Indeed, I shall not be sorry to eat a piece of fresh venison."

Without seeking to reconcile what was contradictory between Captain Nemo's manifest aversion to islands and continents, and his invitation to hunt in a forest, I contented myself with replying :

"Let us first see where the Island of Crespo is."

I consulted the planisphere, and in $32^{\circ} 40'$ N. lat. and $157^{\circ} 50'$ W. long., I found a small island, recognised in 1801 by Captain Crespo, and marked in the ancient Spanish maps as Rocca de la Plata, the meaning of which is The Silver Rock. We were then about eighteen hundred miles from our starting-point, and the course of the *Nautilus*, a little changed, was bringing it back towards the south-east.

I showed this little rock, lost in the midst of the North Pacific, to my companions.

"If Captain Nemo does sometimes go on dry ground," said I, "he at least chooses desert islands."

Ned Land shrugged his shoulders without speaking, and Conseil and he left me.

After supper, which was served by the steward, mute and impassive, I went to bed, not without some anxiety.

The next morning, the 17th of November, on awakening, I felt that the *Nautilus* was perfectly still. I dressed quickly and entered the saloon.

Captain Nemo was there, waiting for me. He rose, bowed, and asked me if it was convenient for me to accompany him. As he made no allusion to his absence during the last eight days, I did not mention it, and simply answered that my companions and myself were ready to follow him.

We entered the dining-room, where breakfast was served.

"M. Aronnax," said the Captain, "pray, share my breakfast without ceremony ; we will chat as we eat. For, though I promised you a walk in the forest, I did not undertake to find hotels there. So breakfast as a man who will most likely not have his dinner till very late."

I did honour to the repast. It was composed of several kinds of fish, and slices of sea-cucumber, and different sorts of sea-weed. Our drink consisted of pure water, to which the Captain added some drops of a fermented liquor, extracted by the Kamschatcha method from a seaweed known under the name of *Rhodoménia palmata*. Captain Nemo ate at first without saying a word. Then he began :

"Sir, when I proposed to you to hunt in my submarine forest of Crespo, you evidently thought me mad. Sir, you should never judge lightly of any man."

"But Captain, believe me——"

"Be kind enough to listen, and you will then see whether you have any cause to accuse me of folly and contradiction."

"I listen."

"You know as well as I do, Professor, that man can live under water, providing he carries with him a sufficient supply of breathable air. In submarine works, the workman, clad in an impervious dress, with his head in a metal helmet, receives air from above by means of forcing pumps and regulators."

"That is a diving apparatus," said I.

"Just so, but under these conditions the man is not at liberty ; he is attached to the pump which sends him air through an india-rubber tube, and if we were obliged to be thus held to the *Nautilus*, we could not go far."

"And the means of getting free ? " I asked.

"It is to use the Rouquayrol apparatus, invented by two of your own countrymen, which I have brought to perfection for my own use, and which will allow you to risk yourself under these new physiological conditions without any organ whatever suffering. It consists of a reservoir of thick iron plates, in which I store the air under a pressure of fifty atmospheres. This reservoir is fixed on the back by means of braces, like a soldier's knapsack. Its upper part forms a box in which the air is kept by means of a bellows, and therefore cannot escape unless at its normal tension.

In the Rouquayrol apparatus such as we use, two india-rubber pipes leave this box and join a sort of tent which holds the nose and mouth ; one is to introduce fresh air, the other to let out the foul, and the tongue closes one or the other according to the wants of the respirator. But I, in encountering great pressures at the bottom of the sea, was obliged to shut my head, like that of a diver in a ball of copper ; and it is to this ball of copper that the two pipes, the inspirator and the expirator, open."

" Perfectly, Captain Nemo ; but the air that you carry with you must soon be used ; when it only contains fifteen per cent. of oxygen it is no longer fit to breathe."

" Right ! But I told you, M. Aronnax, that the pumps of the *Nautilus* allow me to store the air under considerable pressure, and on those conditions the reservoir of the apparatus can furnish breathable air for nine or ten hours."

" I have no further objections to make," I answered. " I will only ask you one thing, Captain—how can you light your road at the bottom of the sea ? "

" With the Ruhmkorff apparatus, M. Aronnax ; one is carried on the back, the other is fastened to the waist. It is composed of a Bunsen pile, which I do not work with bichromate of potash, but with sodium. A wire is introduced which collects the electricity produced, and directs it towards a particularly made lantern. In this lantern is a spiral glass which contains a small quantity of carbonic gas. When the apparatus is at work this gas becomes luminous, giving out a white and continuous light. Thus provided, I can breathe and I can see."

" Captain Nemo, to all my objections you make such crushing answers that I dare no longer doubt. But, if I am forced to admit the Rouquayrol and Ruhmkorff apparatus, I must be allowed some reservations with regard to the gun I am to carry."

" But it is not a gun for powder," answered the Captain.

" Then it is an air-gun."

" Doubtless ! How would you have me manufacture

gunpowder on board, without either saltpetre, sulphur, or charcoal ? ”

“ Besides,” I added, “ to fire under water in a medium eight hundred and fifty-five times denser than the air, we must conquer very considerable resistance.”

“ That would be no difficulty. There exist guns, according to Fulton, perfected in England by Philip Coles and Burley, in France by Furcy, and in Italy by Landi, which are furnished with a peculiar system of closing, which can fire under these conditions. But I repeat, having no powder, I use air under great pressure, which the pumps of the *Nautilus* furnish abundantly.”

“ But this air must be rapidly used ? ”

“ Well, have I not my Rouquayrol reservoir, which can furnish it at need ? A tap is all that is required. Besides, M. Aronnax, you must see yourself that, during our submarine hunt, we can spend but little air and but few balls.”

“ But it seems to me that in this twilight, and in the midst of this fluid, which is very dense compared with the atmosphere, shots could not go far, nor easily prove mortal.”

“ Sir, on the contrary, with this gun every blow is mortal ; and, however lightly the animal is touched, it falls as if struck by a thunderbolt.”

“ Why ? ”

“ Because the balls sent by this gun are not ordinary balls, but little cases of glass. These glass cases are covered with a case of steel, and weighted with a pellet of lead ; they are real Leyden bottles, into which the electricity is forced to a very high tension. With the slightest shock they are discharged, and the animal, however strong it may be, falls dead. I must tell you that these cases are size number four, and that the charge for an ordinary gun would be ten.”

“ I will argue no longer,” I replied, rising from the table. “ I have nothing left me but to take my gun. At all events, I will go where you go.”

Captain Nemo then led me aft ; and in passing before Ned’s and Conseil’s cabin, I called my two companions,

who followed immediately. We then came to a kind of cell near the machinery-room, in which we were to put on our walking-dress.

CHAPTER XV

A WALK ON THE BOTTOM OF THE SEA

THIS cell was, to speak correctly, the arsenal and wardrobe of the *Nautilus*. A dozen diving apparatuses hung from the partition waiting our use.

Ned Land, on seeing them, showed evident repugnance to dress himself in one.

"But, my worthy Ned, the forests of the Island of Crespo are nothing but submarine forests."

"Good!" said the disappointed harpooner, who saw his dreams of fresh meat fade away. "And you, M. Aronax, are you going to dress yourself in those clothes?"

"There is no alternative, Master Ned."

"As you please, sir," replied the harpooner, shrugging his shoulders; "but, as for me, unless I am forced, I will never get into one."

"No one will force you, Master Ned," said Captain Nemo.

"Is Conseil going to risk it?" asked Ned.

"I follow my master wherever he goes," replied Conseil.

At the Captain's call two of the ship's crew came to help us dress in these heavy and impervious clothes, made of india-rubber without seam, and constructed expressly to resist considerable pressure. One would have thought it a suit of armour, both supple and resisting. This suit formed trousers and waistcoat. The trousers were finished off with thick boots, weighted with heavy leaden soles. The texture of the waistcoat was held together by bands of copper, which crossed the chest, protecting it from the great pressure of the water, and leaving the lungs free to act; the sleeves ended in gloves, which in no way restrained the movement of the hands. There was a vast difference noticeable between

these consummate apparatuses and the old cork breast-plates, jackets, and other contrivances in vogue during the eighteenth century.

Captain Nemo and one of his companions (a sort of Hercules, who must have possessed great strength), Conseil and myself were soon enveloped in the dresses. There remained nothing more to be done but to enclose our heads in the metal box. But, before proceeding to this operation, I asked the Captain's permission to examine the guns we were to carry.

One of the *Nautilus* men gave me a simple gun, the butt end of which, made of steel, hollow in the centre, was rather large. It served as a reservoir for compressed air, which a valve, worked by a spring, allowed to escape into a metal tube. A box of projectiles in a groove in the thickness of the butt end contained about twenty of these electric balls, which, by means of a spring, were forced into the barrel of the gun. As soon as one shot was fired, another was ready.

"Captain Nemo," said I, "this arm is perfect, and easily handled : I only ask to be allowed to try it. But how shall we gain the bottom of the sea ? "

"At this moment, Professor, the *Nautilus* is stranded in five fathoms, and we have nothing to do but to start."

"But how shall we get off ? "

"You shall see."

Captain Nemo thrust his head into the helmet, Conseil and I did the same, not without hearing an ironical "Good sport !" from the Canadian. The upper part of our dress terminated in a copper collar upon which was screwed the metal helmet. Three holes, protected by thick glass, allowed us to see in all directions, by simply turning our head in the interior of the head-dress. As soon as it was in position, the Rouquayrol apparatus on our backs began to act ; and, for my part, I could breathe with ease.

With the Ruhmkorff lamp hanging from my belt, and the gun in my hand, I was ready to set out. But to speak

the truth, imprisoned in these heavy garments, and glued to the deck by my leaden soles, it was impossible for me to take a step.

But this state of things was provided for. I felt myself being pushed into a little room contiguous to the wardrobe-room. My companions followed, towed along in the same way. I heard a water-tight door, furnished with stopper-plates, close upon us, and we were wrapped in profound darkness.

After some minutes, a loud hissing was heard. I felt the cold mount from my feet to my chest. Evidently from some part of the vessel they had, by means of a tap, given entrance to the water, which was invading us, and with which the room was soon filled. A second door cut in the side of the *Nautilus* then opened. We saw a faint light. In another instant our feet trod the bottom of the sea.

And now, how can I retrace the impression left upon me by that walk under the waters? Words are impotent to relate such wonders! Captain Nemo walked in front, his companion followed some steps behind. Conseil and I remained near each other, as if an exchange of words had been possible through our metallic cases. I no longer felt the weight of my clothing, or of my shoes, of my reservoir of air, or my thick helmet, in the midst of which my head rattled like an almond in its shell.

The light, which lit the soil thirty feet below the surface of the ocean, astonished me by its power. The solar rays shone through the watery mass easily, and dissipated all colour, and I clearly distinguished objects at a distance of a hundred and fifty yards. Beyond that the tints darkened into fine gradations of ultramarine, and faded into vague obscurity. Truly this water which surrounded me was but another air denser than the terrestrial atmosphere, but almost as transparent. Above me was the calm surface of the sea. We were walking on fine, even sand, not wrinkled, as on a flat shore, which retains the impression of the billows. This dazzling carpet, really a reflector, repelled

the rays of the sun with wonderful intensity, which accounted for the vibration which penetrated every atom of liquid. Shall I be believed when I say that, at the depth of thirty feet, I could see as if I was in broad daylight ?

For a quarter of an hour I trod on this sand, sown with the impalpable dust of shells. The hull of the *Nautilus*, resembling a long shoal, disappeared by degrees ; but its lantern, when darkness should overtake us in the waters, would help to guide us on board by its distinct rays.

Soon forms of objects outlined in the distance were discernible. I recognised magnificent rocks, hung with a tapestry of zoophytes of the most beautiful kind, and I was at first struck by the peculiar effect of this medium.

It was then ten in the morning ; the rays of the sun struck the surface of the waves at rather an oblique angle, and at the touch of their light, decomposed by refraction as through a prism, flowers, rocks, plants, shells, and polypi were shaded at the edges by the seven solar colours. It was marvellous, a feast for the eyes, this complication of coloured tints, a perfect kaleidoscope of green, yellow, orange, violet, indigo, and blue ; in one word, the whole palette of an enthusiastic colourist ! Why could I not communicate to Conseil the lively sensations which were mounting to my brain, and rival him in expressions of admiration ? For aught I knew, Captain Nemo and his companion might be able to exchange thoughts by means of signs previously agreed upon. So, for want of better, I talked to myself ; I declaimed in the copper box which covered my head, thereby expending more air in vain words than was perhaps wise.

Various kinds of isis, clusters of pure tuft-coral, prickly fungi, and anemones formed a brilliant garden of flowers, decked with their collarettes of blue tentacles, sea-stars studding the sandy bottom. It was a real grief to me to crush under my feet the brilliant specimens of molluscs which strewed the ground by thousands, of hammerheads, donaciæ (veritable bounding shells), of staircases, and red

helmet-shells, angel-wings, and many others produced by this inexhaustible ocean. But we were bound to walk, so we went on, whilst above our heads waved medusæ whose umbrellas of opal or rose-pink, scalloped with a band of blue, sheltered us from the rays of the sun and fiery pelagiæ, which, in the darkness, would have strewn our path with phosphorescent light.

All these wonders I saw in the space of a quarter of a mile, scarcely stopping, and following Captain Nemo, who beckoned me on by signs. Soon the nature of the soil changed ; to the sandy plain succeeded an extent of slimy mud, which the Americans call " ooze," composed of equal parts of silicious and calcareous shells. We then travelled over a plain of seaweed of wild and luxuriant vegetation. This sward was of close texture, and soft to the feet, and rivalled the softest carpet woven by the hand of man. But whilst verdure was spread at our feet, it did not abandon our heads. A light network of marine plants, of that inexhaustible family of seaweeds of which more than two thousand kinds are known, grew on the surface of the water. I noticed that the green plants kept nearer the top of the sea, whilst the red were at a greater depth, leaving to the black or brown the care of forming gardens and parterres in the remote beds of the ocean.

We had quitted the *Nautilus* about an hour and a half. It was near noon ; I knew by the perpendicularity of the sun's rays, which were no longer refracted. The magical colours disappeared by degrees, and the shades of emerald and sapphire were effaced. We walked with a regular step, which rang upon the ground with astonishing intensity ; the slightest noise was transmitted with a quickness to which the ear is unaccustomed on the earth ; indeed, water is a better conductor of sound than air, in the ratio of four to one. At this period the earth sloped downwards ; the light took a uniform tint. We were at a depth of a hundred and five yards and twenty inches, undergoing a pressure of six atmospheres.

At this depth I could still see the rays of the sun, though feebly ; to their intense brilliancy had succeeded a reddish twilight, the lowest state between day and night ; but we could still see well enough ; it was not necessary to resort to the Ruhmkorff apparatus as yet. At this moment Captain Nemo stopped ; he waited till I joined him, and then pointed to an obscure mass, looming in the shadow, at a short distance.

"It is the forest of the Island of Crespo," thought I ; and I was not mistaken.

CHAPTER XVI

A SUBMARINE FOREST

WE had at last arrived on the borders of this forest, doubtless one of the finest of Captain Nemo's immense domains. He looked upon it as his own, and considered he had the same right over it that the first men had in the first days of the world. And, indeed, who would have disputed with him the possession of this submarine property ? What other hardier pioneer would come, hatchet in hand, to cut down the dark corses ?

This forest was composed of large tree-plants ; and the moment we penetrated under its vast arcades, I was struck by the singular position of their branches—a position I had not yet observed.

Not a herb which carpeted the ground, not a branch which clothed the trees, was either broken or bent, nor did they extend horizontally ; all stretched up to the surface of the ocean. Not a filament, not a ribbon, however thin they might be, but kept as straight as a rod of iron. The fuci and llianas grew in rigid perpendicular lines, due to the density of the element which had produced them. Motionless yet, when bent to one side by the hand, they directly resumed their former position. Truly it was the region of perpendicularity !

I soon accustomed myself to this fantastic position, as well as to the comparative darkness which surrounded us. The soil of the forest seemed covered with sharp blocks, difficult to avoid. The submarine flora struck me as being very perfect, and richer even than it would have been in the arctic or tropical zones, where these productions are not so plentiful. But for some minutes I involuntarily confounded the genera, taking animals for plants ; and who would not have been mistaken ? The fauna and the flora are too closely allied in this submarine world.

These plants are self-propagated, and the principle of their existence is in the water, which upholds and nourishes them. The greater number, instead of leaves, shoot forth blades of capricious shapes, comprised within a scale of colours pink, carmine, green, olive, fawn, and brown.

“ Curious anomaly, fantastic element ! ” said an ingenious naturalist, “ in which the animal kingdom blossoms, and the vegetable does not ! ”

In about an hour Captain Nemo gave the signal to halt. I, for my part, was not sorry, and we stretched ourselves under an arbour of *alarix*, the long thin blades of which stood up like arrows.

This short rest seemed delicious to me ; there was nothing wanting but the charm of conversation ; but, impossible to speak, impossible to answer, I only put my great copper head to Conseil’s. I saw the worthy fellow’s eyes glistening with delight, and, to show his satisfaction, he shook himself in his breastplate of air, in the most comical way in the world.

After four hours of this walking, I was surprised not to find myself dreadfully hungry. How to account for this state of the stomach I could not tell. But instead I felt an insurmountable desire to sleep, which happens to all divers. And my eyes soon closed behind the thick glasses, and I fell into a heavy slumber, which the movement alone had prevented before. Captain Nemo and his robust companion, stretched in the clear crystal, set us the example.

How long I remained buried in this drowsiness I cannot judge, but, when I woke, the sun seemed sinking towards the horizon. Captain Nemo had already risen, and I was beginning to stretch my limbs, when an unexpected apparition brought me briskly to my feet.

A few steps off, a monstrous sea-spider, about thirty-eight inches high, was watching me with squinting eyes, ready to spring upon me. Though my diver's dress was thick enough to defend me from the bite of this animal, I could not help shuddering with horror. Conseil and the sailor of the *Nautilus* awoke at this moment. Captain Nemo pointed out the hideous crustacean, which a blow from the butt end of the gun knocked over, and I saw the horrible claws of the monster writhe in terrible convulsions. This incident reminded me that other animals more to be feared might haunt these obscure depths, against whose attacks my diving-dress would not protect me. I had never thought of it before, but I now resolved to be upon my guard. Indeed, I thought that this halt would mark the termination of our walk ; but I was mistaken, for, instead of returning to the *Nautilus*, Captain Nemo continued his bold excursion. The ground was still on the incline, its declivity seemed to be getting greater, and to be leading us to greater depths. It must have been about three o'clock when we reached a narrow valley, between high perpendicular walls, situated about seventy-five fathoms deep. Thanks to the perfection of our apparatus, we were forty-five fathoms below the limit which nature seems to have imposed on man as to his submarine excursions.

I say seventy-five fathoms, though I had no instrument by which to judge the distance. But I knew that even in the clearest waters the solar rays could not penetrate further. And accordingly the darkness deepened. At ten paces not an object was visible. I was groping my way, when I suddenly saw a brilliant white light. Captain Nemo had just put his electric apparatus into use ; his

companion did the same, and Conseil and I followed their example. By turning a screw I established a communication between the wire and the spiral glass, and the sea, lit by our four lanterns, was illuminated for a circle of thirty-six yards.

As we walked I thought the light of our Ruhmkorff apparatus could not fail to draw some inhabitant from its dark couch. But if they did approach us, they at least kept at a respectful distance from the hunters. Several times I saw Captain Nemo stop, put his gun to his shoulder, and after some moments drop it and walk on. At last, after about four hours, this marvellous excursion came to an end. A wall of superb rocks, in an imposing mass, rose before us, a heap of gigantic blocks, an enormous, steep granite shore, forming dark grottos, but which presented no practicable slope ; it was the prop of the Island of Crespo. It was the earth ! Captain Nemo stopped suddenly. A gesture of his brought us all to a halt ; and, however desirous I might be to scale the wall, I was obliged to stop. Here ended Captain Nemo's domains. And he would not go beyond them. Further on was a portion of the globe he might not trample upon.

The return began. Captain Nemo had returned to the head of his little band, directing their course without hesitation. I thought we were not following the same road to return to the *Nautilus*. The new road was very steep, and consequently very painful. We approached the surface of the sea rapidly. But this return to the upper strata was not so sudden as to cause relief from the pressure too rapidly, which might have produced serious disorder in our organisation, and brought on internal lesions, so fatal to divers. Very soon light reappeared and grew, and, the sun being low on the horizon, the refraction edged the different objects with a spectral ring. At ten yards and a half deep, we walked amidst a shoal of little fishes of all kinds, more numerous than the birds of the air, and also more agile ; but no aquatic game worthy of a shot had as

yet met our gaze, when at that moment I saw the Captain shoulder his gun quickly, and follow a moving object into the shrubs. He fired ; I heard a slight hissing, and a creature fell stunned at some distance from us. It was a magnificent sea-otter, an *enhydrus*, the only exclusively marine quadruped. This otter was five feet long, and must have been very valuable. Its skin, chestnut-brown above and silvery underneath, would have made one of those beautiful furs so sought after in the Russian and Chinese markets : the fineness and the lustre of its coat would certainly fetch £80. I admired this curious mammal, with its rounded head ornamented with short ears, its round eyes, and white whiskers like those of a cat, with webbed feet and nails, and tufted tail. This precious animal, hunted and tracked by fishermen, has now become very rare, and taken refuge chiefly in the northern parts of the Pacific, or probably its race would soon become extinct.

Captain Nemo's companion took the beast, threw it over his shoulder, and we continued our journey. For one hour a plain of sand lay stretched before us. Sometimes it rose to within two yards and some inches of the surface of the water. I then saw our image clearly reflected, drawn inversely, and above us appeared an identical group reflecting our movements and our actions ; in a word, like us in every point, except that they walked with their heads downward and their feet in the air.

Another effect I noticed, which was the passage of thick clouds which formed and vanished rapidly ; but on reflection I understood that these seeming clouds were due to the varying thickness of the reeds at the bottom, and I could even see the fleecy foam which their broken tops multiplied on the water, and the shadows of large birds passing above our heads, whose rapid flight I could discern on the surface of the sea.

On this occasion I was witness to one of the finest gunshots which ever made the nerves of a hunter thrill. A large bird of great breadth of wing, clearly visible,

approached, hovering over us. Captain Nemo's companion shouldered his gun and fired, when it was only a few yards above the waves. The creature fell stunned, and the force of its fall brought it within the reach of the dexterous hunter's grasp. It was an albatross of the finest kind.

Our march had not been interrupted by this incident. For two hours we followed these sandy plains, then fields of algæ very disagreeable to cross. Candidly, I could do no more when I saw a glimmer of light, which, for a half mile, broke the darkness of the waters. It was the lantern of the *Nautilus*. Before twenty minutes were over we should be on board, and I should be able to breathe with ease, for it seemed that my reservoir supplied air very deficient in oxygen. But I did not reckon on an accidental meeting, which delayed our arrival for some time.

I had remained some steps behind, when I presently saw Captain Nemo coming hurriedly towards me. With his strong hand he bent me to the ground, his companion doing the same to Conseil. At first I knew not what to think of this sudden attack, but I was soon reassured by seeing the Captain lie down beside me, and remain immovable.

I was stretched on the ground, just under the shelter of a bush of algæ, when, raising my head, I saw some enormous mass, casting phosphorescent gleams, pass blusteringly by.

My blood froze in my veins as I recognised two formidable sharks which threatened us. It was a couple of tintoreas, terrible creatures, with enormous tails and a dull glassy stare, the phosphorescent matter ejected from holes pierced around the muzzle. Monstrous brutes ! which would crush a whole man in their iron jaws. I did not know whether Conseil stopped to classify them ; for my part, I noticed their silver bellies, and their huge mouths bristling with teeth, from a very unscientific point of view, and more as a possible victim than as a naturalist.

Happily the voracious creatures do not see well. They passed without seeing us, brushing us with their brownish fins, and we escaped by a miracle from a danger certainly greater than meeting a tiger full-face in the forest. Half an hour after, guided by the electric light we reached the *Nautilus*. The outside door had been left open, and Captain Nemo closed it as soon as we had entered the first cell. He then pressed a knob I heard the pumps working in the midst of the vessel, I felt the water sinking from around me, and in a few moments the cell was entirely empty. The inside door then opened, and we entered the vestry.

There our diving-dress was taken off, not without some trouble, and, fairly worn out from want of food and sleep, I returned to my room, in great wonder at this surprising excursion at the bottom of the sea.

CHAPTER XVII

FOUR THOUSAND LEAGUES UNDER THE PACIFIC

The next morning, the 18th of November, I had quite recovered from my fatigues of the day before, and I went up on to the platform, just as the second lieutenant was uttering his daily phrase.

I was admiring the magnificent aspect of the ocean when Captain Nemo appeared. He did not seem to be aware of my presence, and began a series of astronomical observations. Then, when he had finished, he went and leant on the cage of the watch-light, and gazed abstractedly on the ocean. In the meantime, a number of the sailors of the *Nautilus*, all strong and healthy men, had come up on to the platform. They came to draw up the nets that had been laid all night. These sailors were evidently of different nations, although the European type was visible in all of them. I recognised some unmistakable Irishmen, Frenchmen, some Slaves, and a Greek, or a Candiote. They were civil, and only used that odd language among themselves,

the origin of which I could not guess, neither could I question them.

The nets were hauled in. They were a large kind of "chaluts," like those on the Normandy coasts, great pockets that the waves and a chain fixed in the smaller meshes kept open. These pockets, drawn by iron poles, swept through the water, and gathered in everything in their way. That day they brought up curious specimens from those productive coasts.

I reckoned that the haul had brought in more than nine hundredweight of fish. It was a fine haul, but not to be wondered at. Indeed, the nets are let down for several hours, and enclose in their meshes an infinite variety. We had no lack of excellent food, and the rapidity of the *Nautilus* and the attraction of the electric light could always renew our supply. These several productions of the sea were immediately lowered through the panel to the steward's room, some to be eaten fresh, and others pickled.

The fishing ended, the provision of air renewed, I thought that the *Nautilus* was about to continue its submarine excursion, and was preparing to return to my room, when, without further preamble, the Captain turned to me, saying :

"Professor, is not this ocean gifted with real life? It has its tempers and its gentle moods. Yesterday it slept as we did, and now it has woke after a quiet night. Look!" he continued, "it wakes under the caresses of the sun. It is going to renew its dirunal existence. It is an interesting study to watch the play of its organisation. It has a pulse, arteries, spasms; and I agree with the learned Maury, who discovered in it a circulation as real as the circulation of blood in animals.

"Yes, the ocean has indeed circulation, and to promote it, the Creator has caused things to multiply in it—caloric, salt, and animalculæ."

When Captain Nemo spoke thus, he seemed altogether changed, and aroused an extraordinary emotion in me.

"Also," he added, "true existence is there ; and I can imagine the foundations of nautical towns, clusters of submarine houses, which, like the *Nautilus*, would ascend every morning to breathe at the surface of the water, free towns, independent cities. Yet who knows whether some despot——"

Captain Nemo finished his sentence with a violent gesture. Then, addressing me as if to chase away some sorrowful thought :

"M. Arronax," he asked, "do you know the depth of the ocean ?"

"I only know, Captain, what the principal soundings have taught us."

"Could you tell me them, so that I can suit them to my purpose ?"

"These are some," I replied, "that I remember. If I am not mistaken, a depth of 8,000 yards has been found in the North Atlantic, and 2,500 yards in the Mediterranean. The most remarkable soundings have been made in the South Atlantic, near the thirty-fifth parallel, and they gave 12,000 yards, 14,000 yards, and 15,000 yards. To sum up all, it is reckoned that if the bottom of the sea were levelled, its mean depth would be about one and three-quarter leagues."

"Well, Professor," replied the Captain, "we shall show you better than that I hope. As to the mean depth of this part of the Pacific, I tell you it is only 4,000 yards."

Having said this, Captain Nemo went towards the panel, and disappeared down the ladder. I followed him, and went into the large drawing-room. The screw was immediately put in motion, and the log gave twenty miles an hour.

During the days and weeks that passed, Captain Nemo was very sparing of his visits. I seldom saw him. The lieutenant pricked the ship's course regularly on the chart, so I could always tell exactly the route of the *Nautilus*.

Nearly every day, for some time, the panels of the

drawing-room were opened, and we were never tired of penetrating the mysteries of the submarine world.

The general direction of the *Nautilus* was south-east, and it kept between 100 and 150 yards of depth. One day, however, I do not know why, being drawn diagonally by means of the inclined planes, it touched the bed of the sea. The thermometer indicated a temperature of 4.25 (cent.) : a temperature that at this depth seemed common to all latitudes.

At three o'clock in the morning of the 26th of November the *Nautilus* crossed the tropic of Cancer at 172° long. On 27th instant it sighted the Sandwich Islands, where Cook died, February 14, 1779. We had then gone 4,860 leagues from our starting-point. In the morning, when I went on the platform, I saw two miles to windward, Hawaii, the largest of the seven islands that form the group. I saw clearly the cultivated ranges, and the several mountain-chains that run parallel with the side, and the volcanoes that overtop Mouna-Rea, which rise 5,000 yards above the level of the sea. Besides other things the nets brought up, were several flabellariæ and graceful polypi, that are peculiar to that part of the ocean. The direction of the *Nautilus* was still to the south-east. It crossed the equator December 1, in 142° long. ; and on the 4th of the same month, after crossing rapidly and without anything in particular occurring, we sighted the Marquesas group. I saw, three miles off, Martin's peak in Nouka-Hiva, the largest of the group that belongs to France. I only saw the woody mountains against the horizon, because Captain Nemo did not wish to bring the ship to the wind. There the nets brought up beautiful specimens of fish : some with azure fins and tails like gold, the flesh of which is unrivalled ; some nearly destitute of scales, but of exquisite flavour ; others, with bony jaws, and yellow-tinged gills, as good as bonitos ; all fish that would be of use to us. After leaving these charming islands protected by the French flag, from the 4th to the 11th of December the *Nautilus* sailed over about 2,000 miles.

During the daytime of the 11th of December I was busy reading in the large drawing-room. Ned Land and Conseil watched the luminous water through the half-open panels. The *Nautilus* was immovable. While its reservoirs were filled, it kept at a depth of 1,000 yards, a region rarely visited in the ocean, and in which large fish were seldom seen.

I was then reading a charming book by Jean Macé, *The Slaves of the Stomach*, and I was learning some valuable lessons from it, when Conseil interrupted me.

"Will master come here a moment?" he said, in a curious voice.

"What is the matter, Conseil?"

"I want master to look."

I rose, went, and leaned on my elbows before the panes and watched.

In a full electric light, an enormous black mass, quite immovable, was suspended in the midst of the waters. I watched it attentively, seeking to find out the nature of this gigantic cetacean. But a sudden thought crossed my mind. "A vessel!" I said, half aloud.

"Yes," replied the Canadian, "a disabled ship that has sunk perpendicularly."

Ned Land was right; we were close to a vessel of which the tattered shrouds still hung from their chains. The keel seemed to be in good order, and it had been wrecked at most some few hours. Three stumps of masts, broken off about two feet above the bridge, showed that the vessel had had to sacrifice its masts. But, lying on its side, it had filled, and it was heeling over to port. This skeleton of what it had once been was a sad spectacle as it lay lost under the waves, but sadder still was the sight of the bridge, where some corpses, bound with ropes, were still lying. I counted five—four men, one of whom was standing at the helm, and a woman standing by the poop, holding an infant in her arms. She was quite young. I could distinguish her features, which the water had not decomposed, by the brilliant light

from the *Nautilus*. In one despairing effort, she had raised her infant above her head—poor little thing !—whose arms encircled its mother's neck. The attitude of the four sailors was frightful, distorted as they were by their convulsive movements, whilst making a last effort to free themselves from the cords that bound them to the vessel. The steersman alone, calm, with a grave, clear face, his grey hair glued to his forehead, and his hand clutching the wheel of the helm, seemed even then to be guiding the three broken masts through the depths of the ocean.

What a scene ! We were dumb ; our hearts beat fast before this shipwreck, taken as it were from life and photographed in its last moments. And I saw already, coming towards it with hungry eyes, enormous sharks, attracted by the human flesh.

However, the *Nautilus*, turning, went round the submerged vessel, and in one instant I read on the stern—
“ *The Florida, Sunderland.*”

CHAPTER XVIII

VANIKORO

THIS terrible spectacle was the forerunner of the series of maritime catastrophes that the *Nautilus* was destined to meet with in its route. As long as it went through more frequented waters, we often saw the hulls of shipwrecked vessels that were rotting in the depths, and deeper down cannons, bullets, anchors, chains, and a thousand other iron materials eaten up by rust. However, on the 11th of December we sighted the Pomotou Islands, the old “ dangerous group ” of Bougainville, that extend over a space of 500 leagues at E.S.E. to W.N.W., from the Island Ducie to that of Lazareff. This group covers an area of 370 square leagues, and it is formed of sixty groups of islands, among which the Gambier group is remarkable, over which France

exercises sway. These are coral islands, slowly raised, but continuous, created by the daily work of polypi. Then this new island will be joined later on to the neighbouring groups, and a fifth continent will stretch from New Zealand and New Caledonia, and from thence to the Marquesas.

One day, when I was suggesting this theory to Captain Nemo, he replied coldly :

“The earth does not want new continents, but new men.”

On 15th December, we left to the east the bewitching group of the Societies and the graceful Tahiti, queen of the Pacific. I saw in the morning, some miles to the windward, the elevated summits of the island. These waters furnished our table with excellent fish, mackerel, bonitos, and some varieties of a sea-serpent.

On the 25th of December the *Nautilus* sailed into the midst of the New Hebrides, discovered by Quiros in 1606, and that Bougainville explored in 1768, and to which Cook gave its present name in 1773. This group is composed principally of nine large islands, that form a band of 120 leagues N.N.S. to S.S.W., between 15° and 2° S. lat., and 164° and 168° long. We passed tolerably near to the Island of Aurou, that at noon looked like a mass of green woods, surmounted by a peak of great height.

That day being Christmas Day, Ned Land seemed to regret sorely the non-celebration of “Christmas,” the family fête of which *Protestants* are so fond. I had not seen Captain Nemo for a week, when, on the morning of the 27th, he came into the large drawing-room, always seeming as if he had seen you five minutes before. I was busily tracing the route of the *Nautilus* on the planisphere. The Captain came up to me, put his finger on one spot on the chart, and said this single word.

“Vanikoro.”

The effect was magical ! It was the name of the islands on which La Perouse had been lost ! I rose suddenly.

“The *Nautilus* has brought us to Vanikoro ? ” I asked.

"Yes, Professor," said the Captain.

"And I can visit the celebrated islands where the *Boussole* and the *Astrolabe* struck?"

"If you like, Professor."

"When shall we be there?"

"We are there now."

Followed by Captain Nemo, I went up on to the platform, and greedily scanned the horizon.

To the N.E. two volcanic islands emerged of unequal size, surrounded by a coral reef that measured forty miles in circumference. We were close to Vanikoro, really the one to which Dumont d'Urville gave the name of Isle de la Recherche, and exactly facing the little harbour of Vanou, situated in $16^{\circ} 4' \text{ S. lat.}$, and $164^{\circ} 32' \text{ E. long.}$ The earth seemed covered with verdure from the shore to the summits in the interior, that were crowned by Mount Kapogo, 476 feet high. The *Nautilus*, having passed the outer belt of rocks by a narrow strait, found itself among breakers where the sea was from thirty to forty fathoms deep. Under the verdant shade of some mangroves I perceived some savages, who appeared greatly surprised at our approach. In the long black body, moving between wind and water, did they not see some formidable cetacean that they regarded with suspicion?

Just then Captain Nemo asked me what I knew about the wreck of La Perouse.

"Only what everyone knows, Captain," I replied.

"And could you tell me what everyone knows about it?" he inquired, ironically.

"Easily."

I related to him all that the last works of Dumont d'Urville had made known—works from which the following is a brief account.

La Perouse, and his second, Captain de Langle, were sent by Louis XVI, in 1785, on a voyage of circumnavigation. They embarked in the corvettes *Boussole* and the *Astrolabe*, neither of which were again heard of. In 1791,

the French Government, justly uneasy as to the fate of these two sloops, manned two large merchantmen, the *Recherche* and the *Esperance*, which left Brest the 28th of September under the command of Bruni d'Entrecasteaux.

Two months after, they learned from Bowen, commander of the *Albermarle*, that the débris of shipwrecked vessels had been seen on the coasts of New Georgia. But D'Entrecasteaux, ignoring this communication—rather uncertain, besides—directed his course towards the Admiralty Islands, mentioned in a report of Captain Hunter's as being the place where La Perouse was wrecked.

They sought in vain. The *Esperance* and the *Recherche* passed before Vanikoro without stopping there, and, in fact, this voyage was most disastrous, as it cost D'Entrecasteaux his life, and those of two of his lieutenants, besides several of his crew.

Captain Dillon, a shrewd old Pacific sailor, was the first to find unmistakable traces of the wrecks. On the 15th of May, 1824, his vessel, the *St. Patrick*, passed close to Tikopia, one of the New Hebrides. There a Lascar came alongside in a canoe, sold him the handle of a sword in silver that bore the print of characters engraved on the hilt. The Lascar pretended that six years before, during a stay at Vanikoro, he had seen two Europeans that belonged to some vessels that had run aground on the reefs some years ago.

Dillon guessed that he meant La Perouse, whose disappearance had troubled the whole world. He tried to get on to Vanikoro, where, according to the Lascar, he would find numerous débris of the wreck, but winds and tides prevented him.

Dillon returned to Calcutta. There he interested the Asiatic Society and the Indian Company in his discovery. A vessel, to which was given the name of the *Recherche*, was put at his disposal, and he set out, 23rd January, 1827, accompanied by a French agent.

The *Recherche*, after touching at several points in the

Pacific, cast anchor before Vanikoro, 7th July, 1827, in that same harbour of Vanou where the *Nautilus* was at this time.

There it collected numerous relics of the wreck—iron utensils, anchors, pulley-strops, swivel-guns, an 18 lb. shot, fragments of astronomical instruments, a piece of crown-work, and a bronze clock, bearing this inscription—“ *Bazin m'a fait*,” the mark of the foundry of the arsenal at Brest about 1785. There could be no further doubt.

Dillon, having made all inquiries, stayed in the unlucky place till October. Then he quitted Vanikoro, and directed his course towards New Zealand ; put into Calcutta, 7th April, 1828, and returned to France, where he was warmly welcomed by Charles X.

But at the same time, without knowing Dillon's movements, Dumont d'Urville had already set out to find the scene of the wreck. And they had learned from a whaler that some medals and a cross of St. Louis had been found in the hands of some savages of Louisiade and New Caledonia. Dumont d'Urville, commander of the *Astrolabe*, had then sailed, and two months after Dillon had left Vanikoro he put into Hobart Town. There he learned the results of Dillon's inquiries, and found that a certain James Hobbs, second lieutenant of the *Union* of Calcutta, after landing on an island situated $8^{\circ} 18'$ S. lat., and $156^{\circ} 30'$ E. long., had seen some iron bars and red stuffs used by the natives of these parts. Dumont d'Urville, much perplexed, and not knowing how to credit the reports of low-class journals, decided to follow Dillon's track.

On the 10th of February, 1828, the *Astrolabe* appeared off Tikopia, and took as guide and interpreter a deserter found on the island ; made his way to Vanikoro, sighted it on the 12th inst., lay among the reefs until the 14th, and not until the 20th did he cast anchor within the barrier in the harbour of Vanou.

On the 23rd, several officers went round the island and brought back some unimportant trifles. The natives,

adopting a system of denials and evasions, refused to take them to the unlucky place. This ambiguous conduct led them to believe that the natives had ill-treated the castaways, and indeed they seemed to fear that Dumont d'Urville had come to avenge La Perouse and his unfortunate crew.

However, on the 26th, appeased by some presents, and understanding that they had no reprisals to fear, they led M. Jacquireot to the scene of the wreck.

There, in three or four fathoms of water, between the reefs of Pacou and Vanou, lay anchors, cannons, pigs of lead and iron, embedded in the limy concretions. The large boat and the whaler belonging to the *Astrolabe* were sent to this place, and, not without some difficulty, their crews hauled up an anchor weighing 1,800 lb., a brass gun, some pigs of iron, and two copper swivel-guns.

Dumont d'Urville, questioning the natives, learned too that La Perouse, after losing both his vessels on the reefs of this island, had constructed a smaller boat, only to be lost a second time. Where, no one knew.

But the French Government, fearing that Dumont d'Urville was not acquainted with Dillon's movements, had sent the sloop *Bayonnaise*, commanded by Legoarant de Tromelin, to Vanikoro, which had been stationed on the west coast of America. The *Bayonnaise* cast her anchor before Vanikoro some months after the departure of the *Astrolabe*, but found no new document ; but stated that the savages had respected the monument to La Perouse. That is the substance of what I told Captain Nemo.

"So," he said, "no one knows now where the third vessel perished that was constructed by the castaways on the island of Vanikoro ?"

"No one knows."

Captain Nemo said nothing, but signed to me to follow him into the large saloon. The *Nautilus* sank several yards below the waves, and the panels were opened.

I hastened to the aperture, and under the crustations of coral, covered with fungi, I recognised certain débris that

the drags had not been able to tear up—iron stirrups, anchors, cannons, bullets, capstan fittings, the stem of a ship, all objects clearly proving the wreck of some vessel, and now carpeted with living flowers. While I was looking on this desolate scene, Captain Nemo said, in a sad voice :

“ Commander La Perouse set out 7th December, 1785, with his vessels *La Boussole* and the *Astrolabe*. He first cast anchor at Botany Bay, visited the Friendly Isles, New Caledonia, then directed his course towards Santa Cruz, and put into Namouka, one of the Hapai group. Then his vessels struck on the unknown reefs of Vanikoro. The *Boussole*, which went first, ran aground on the southerly coast. The *Astrolabe* went to its help, and ran aground too. The first vessel was destroyed almost immediately. The second, stranded under the wind, resisted some days. The natives made the castaways welcome. They installed themselves in the island, and constructed a smaller boat with the débris of the two large ones. Some sailors stayed willingly at Vanikoro ; the others, weak and ill, set out with La Perouse. They directed their course towards the Solomon Isles, and there perished, with everything, on the westerly coast of the chief island of the group, between Capes Deception and Satisfaction.”

“ How do you know that ? ”

“ By this, that I found on the spot where was the last wreck.”

Captain Nemo showed me a tin-plate box, stamped with the French arms, and corroded by the salt water. He opened it, and I saw a bundle of papers, yellow but still readable.

They were the instructions of the naval minister to Commander La Perouse, annotated in the margin in Louis XVI's handwriting.

“ Ah ! it is a fine death for a sailor ! ” said Captain Nemo, at last. “ A coral tomb makes a quiet grave ; and I trust that I and my comrades will find no other.”

CHAPTER XIX

TORRES STRAITS

During the night of the 27th or 28th of December, the *Nautilus* left the shores of Vanikoro with great speed. Her course was south-westerly, and in three days she had gone over the 750 leagues that separated it from La Perouse's group and the south-east point of Papua.

Early on the 1st of January, 1863, Conseil joined me on the platform.

"Master, will you permit me to wish you a happy New Year?"

"What! Conseil; exactly as if I was at Paris in my study at the Jardin des Plantes? Well, I accept your good wishes, and thank you for them. Only, I will ask you what you mean by a 'Happy New Year' under our circumstances? Do you mean the year that will bring us to the end of our imprisonment, or the year that sees us continue this strange voyage?"

"Really, I do not know how to answer, master. We are sure to see curious things, and for the last two months we have not had time for dullness. The last marvel is always the most astonishing; and, if we continue this progression, I do not know how it will end. It is my opinion that we shall never again see the like. I think then, with no offence to master, that a happy year would be one in which we could see everything."

On 2nd January we had made 11,340 miles, or 5,250 French leagues, since our starting-point in the Japan Seas. Before the ship's head stretched the dangerous shores of the coral sea, on the north-east coast of Australia. Our boat lay along some miles from the redoubtable bank on which Cook's vessel was lost, 10th June, 1770. The boat in which Cook was struck on a rock, and, if it did not sink, it was owing to a piece of coral that was broken by the shock, and fixed itself in the broken keel.

I had wished to visit the reef, 360 leagues long, against which the sea, always rough, broke with great violence, with a noise like thunder. But just then the inclined planes drew the *Nautilus* down to a great depth, and I could see nothing of the high coral walls. I had to content myself with the different specimens of fish brought up by the nets. I remarked, among others, some germons, a species of mackerel as large as a tunny, with bluish sides, and striped with transverse bands, that disappear with the animal's life. These fish followed us in shoals, and furnished us with very delicate food. We took also a large number of giltheads, about one and a half inches long, tasting like dorys ; and flying fire-fish like submarine swallows, which, in dark nights, light alternately the air and water with their phosphorescent light.

Two days after crossing the coral sea, 4th January, we sighted the Papuan coasts. On this occasion, Captain Nemo informed me that his intention was to get into the Indian Ocean by the Strait of Torres. His communication ended there.

The Torres Straits are nearly thirty-four leagues wide ; but they are obstructed by an innumerable quantity of islands, islets, breakers, and rocks, that make its navigation almost impracticable ; so that Captain Nemo took all needful precautions to cross them. The *Nautilus*, floating betwixt wind and water, went at a moderate pace. Her screw, like a cetacean's tail, beat the waves slowly.

Profiting by this, I and my two companions went up on to the deserted platform. Before us was the steersman's cage, and I expected that Captain Nemo was there directing the course of the *Nautilus*. I had before me the excellent charts of the Straits of Torres, and I consulted them attentively. Round the *Nautilus* the sea dashed furiously. The course of the waves, that went from south-east to north-west at the rate of two and a half miles, broke on the coral that showed itself here and there.

“ This is a bad sea ! ” remarked Ned Land.

“Detestable indeed, and one that does not suit a boat like the *Nautilus*.”

“The Captain must be very sure of his route, for I see there pieces of coral that would do for its keel if it only touched them slightly.”

Indeed the situation was dangerous, but the *Nautilus* seemed to slide like magic off these rocks. It did not follow the routes of the *Astrolabe* and the *Zélée* exactly, for they proved fatal to Dumont d’Urville. It bore more northwards, coasted the Islands of Murray, and came back to the south-west towards Cumberland Passage. I thought it was going to pass it by, when, going back to north-west, it went through a large quantity of islands and islets little known, towards the Island Sound and Canal Mauvais.

I wondered if Captain Nemo, foolishly imprudent, would steer his vessel into that pass where Dumont d’Urville’s two corvettes touched ; when, swerving again, and cutting straight through to the west, he steered for the Island of Gilboa.

It was then three in the afternoon. The tide began to recede, being quite full. The *Nautilus* approached the island, that I still saw, with its remarkable border of screw-pines. He stood off it at about two miles distant. Suddenly a shock overthrew me. The *Nautilus* just touched a rock, and stayed immovable, laying lightly to port side.

When I rose, I perceived Captain Nemo and his lieutenant on the platform. They were examining the situation of the vessel, and exchanging words in their incomprehensible dialect.

She was situated thus : Two miles, on the starboard side, appeared Gilboa, stretching from north to west like an immense arm. Towards the south and east some coral showed itself, left by the ebb. We had run aground, and in one of those seas where the tides are middling—a sorry matter for the floating of the *Nautilus*. However, the vessel had not suffered, for her keel was solidly joined. But, if she could neither glide off nor move, she ran the risk of

being for ever fastened to these rocks, and then Captain Nemo's submarine vessel would be done for.

I was reflecting thus, when the Captain, cool and calm, always master of himself, approached me.

"An accident?" I asked.

"No; an incident."

"But an incident that will oblige you perhaps to become an inhabitant of this land from which you flee?"

Captain Nemo looked at me curiously, and made a negative gesture, as much as to say that nothing would force him to set foot on *terra firma* again. Then he said:

"Besides, M. Aronnax, the *Nautilus* is not lost; it will carry you yet into the midst of the marvels of the ocean. Our voyage is only begun, and I do not wish to be deprived so soon of the honour of your company."

"However, Captain Nemo," I replied, without noticing the ironical turn of his phrase, "the *Nautilus* ran aground in open sea. Now the tides are not strong in the Pacific; and, if you cannot lighten the *Nautilus*, I do not see how it will be reinflated."

"The tides are not strong in the Pacific: you are right there, Professor; but in Torres Straits one finds still a difference of a yard and a half between the level of high and low seas. To-day is 4th January, and in five days the moon will be full. Now, I shall be very much astonished if that satellite does not raise these masses of water sufficiently, and render me a service that I should be indebted to her for."

Having said this, Captain Nemo, followed by his lieutenant, redescended to the interior of the *Nautilus*. As to the vessel, it moved not, and was immovable, as if the coralline polypi had already walled it up with their indestructible cement.

"Well, sir?" said Ned Land, who came up to me after the departure of the Captain.

"Well, friend Ned, we will wait patiently for the tide on

the 9th instant ; for it appears that the moon will have the goodness to put it off again."

" Really ? "

" Really. "

" And this Captain is not going to cast anchor at all since the tide will suffice ? " said Conseil, simply.

The Canadian looked at Conseil, then shrugged his shoulders.

" Sir, you may believe me when I tell you that this piece of iron will navigate neither on nor under the sea again ; it is only fit to be sold for its weight. I think, therefore, that the time has come to part company with Captain Nemo."

" Friend Ned, I do not despair of this stout *Nautilus*, as you do ; and in four days we shall know what to hold to on the Pacific tides. Besides, flight might be possible if we were in sight of the English or Provençal coast ; but on the Papuan shores, it is another thing ; and it will be time enough to come to that extremity if the *Nautilus* does not recover itself again, which I look upon as a grave event."

" But do they know, at least, how to act circumspectly ? There is an island ; on that island there are trees ; under those trees, terrestrial animals, bearers of cutlets and roast-beef, to which I would willingly give a trial."

" In this, friend Ned is right," said Conseil, " and I agree with him. Could not master obtain permission from his friend Captain Nemo to put us on land, if only so as not to lose the habit of treading on the solid parts of our planet ? "

" I can ask him, but he will refuse."

" Will master risk it ? " asked Conseil, " and we shall know how to rely upon the Captain's amiability."

To my great surprise, Captain Nemo gave me the permission I asked for, and he gave it very agreeably, without even exacting from me a promise to return to the vessel ; but flight across New Guinea might be very perilous, and I should not have counselled Ned Land to attempt it.

Better to be a prisoner on board the *Nautilus* than to fall into the hands of the natives.

At eight o'clock, armed with guns and hatchets, we got off the *Nautilus*. The sea was pretty calm ; a slight breeze blew on land. Conseil and I rowing, we sped along quickly, and Ned steered in the straight passage that the breakers left between them. The boat was well handled, and moved rapidly.

Ned Land could not restrain his joy. He was like a prisoner that had escaped from prison, and knew not that it was necessary to re-enter it.

"Meat ! We are going to eat some meat ; and what meat !" he replied. "Real game ! no, bread, indeed."

"I do not say that fish is not good ; we must not abuse it ; but a piece of fresh venison, grilled on live coals, will agreeably vary our ordinary course."

"Glutton !" said Conseil, "he makes my mouth water."

"It remains to be seen," I said, "if these forests are full of game, and if the game is not such as will hunt the hunter himself."

"Well said, M. Aronnax," replied the Canadian, whose teeth seemed sharpened like the edge of a hatchet ; "but I will eat tiger—loin of tiger—if there is no other quadruped on this island."

"Friend Ned is uneasy about it," said Conseil.

"Whatever it may be," continued Ned Land, "every animal with four paws without feathers, or with two paws without feathers, will be saluted by my first shot."

"Very well ! Master Land's imprudences are beginning."

"Never fear, M. Aronnax," replied the Canadian ; "I do not want twenty-five minutes to offer you a dish of my sort."

At half-past eight the *Nautilus* boat ran softly aground on a heavy sand, after having happily passed the coral reef that surrounds the Island of Gilboa.

CHAPTER XX

A FEW DAYS ON LAND

I was much impressed on touching land. Ned Land tried the soil with his feet, as if to take possession of it. However, it was only two months before that we had become, according to Captain Nemo, "passengers on board the *Nautilus*," but, in reality, prisoners of its commander.

In a few minutes we were within musket-shot of the coast. The whole horizon was hidden behind a beautiful curtain of forests. Enormous trees, the trunks of which attained a height of 200 feet, were tied to each other by garlands of bindweed, real natural hammocks, which a light breeze rocked. They were mimosas, figs, hibisci, and palm trees, mingled together in profusion ; and under the shelter of their verdant vault grew orchids, leguminous plants, and ferns.

But, without noticing all these beautiful specimens of Papuan flora, the Canadian abandoned the agreeable for the useful. He discovered a coco-tree, beat down some of the fruit, broke them, and we drunk the milk and ate the nut with a satisfaction that protested against the ordinary food on the *Nautilus*.

"Excellent !" said Ned Land.

"Exquisite !" replied Conseil.

"And I do not think," said the Canadian, "that he would object to our introducing a cargo of coco-nuts on board."

"I do not think he would, but he would not taste them."

"So much the worse for him," said Conseil.

"And so much the better for us," replied Ned Land.

"There will be more for us."

"One word only, Master Land," I said to the harpooner, who was beginning to ravage another coco-nut tree. "Coco-nuts are good things, but before filling the canoe with them it would be wise to reconnoitre and see if the

island does not produce some substance not less useful. Fresh vegetables would be welcome on board the *Nautilus*.

"Master is right," replied Conseil; "and I propose to reserve three places in our vessel, one for fruits, the other for vegetables, and the third for the venison, of which I have not yet seen the smallest specimen."

"Conseil, we must not despair," said the Canadian.

"Let us continue," I returned, "and lie in wait. Although the island seems uninhabited, it might still contain some individuals that would be less hard than we on the nature of game."

"Ho! ho!" said Ned Land, moving his jaws significantly.

"Well, Ned!" said Conseil.

"My word!" returned the Canadian, "I begin to understand the charms of anthropophagy."

"Ned! Ned! what are you saying? You, a man-eater? I should not feel safe with you, especially as I share your cabin. I might perhaps wake one day to find myself half devoured."

"Friend Conseil, I like you much, but not enough to eat you unnecessarily."

"I would not trust you," replied Conseil. "But enough. We must absolutely bring down some game to satisfy this cannibal, or else one of these fine mornings, master will find only pieces of his servant to serve him."

While we were talking thus, we were penetrating the sombre arches of the forest, and for two hours we surveyed it in all directions.

Chance rewarded our search for eatable vegetables, and one of the most useful products of the tropical zones furnished us with precious food that we missed on board. I would speak of the bread-fruit tree, very abundant in the island of Gilboa; and I remarked chiefly the variety destitute of seeds, which bears in Malaya the name of "rima."

Ned Land knew these fruits well. He had already eaten

many during his numerous voyages, and he knew how to prepare the eatable substance. Moreover, the sight of them excited him, and he could contain himself no longer.

"Master," he said, "I shall die if I do not taste a little of this bread-fruit pie."

"Taste it, friend Ned—taste it as you want. We are here to make experiments—make them."

"It won't take long," said the Canadian.

And, provided with a *lentil*, he lighted a fire of dead wood that crackled joyously. During this time, Conseil and I chose the best fruits of the bread-fruit. Some had not then attained a sufficient degree of maturity; and their thick skin covered a white but rather fibrous pulp. Others, the greater number yellow and gelatinous, waited only to be picked.

These fruits enclosed no kernel. Conseil brought a dozen to Ned Land, who placed them on a coal fire, after having cut them in thick slices, and while doing this repeating:

"You will see, master, how good this bread is. More so when one has been deprived of it so long. It is not even bread," added he, "but a delicate pastry. You have eaten none, master?"

"No, Ned."

"Very well, prepare yourself for a juicy thing. If you do not come for more, I am no longer the king of harpooners."

After some minutes, the part of the fruits that was exposed to the fire was completely roasted. The interior looked like a white pasty, a sort of soft crumb, the flavour of which was like that of an artichoke.

It must be confessed this bread was excellent, and I ate of it with great relish.

"What time is it now?" asked the Canadian.

"Two o'clock at least," replied Conseil.

"How time flies on firm ground!" sighed Ned Land.

"Let us be off," replied Conseil.

We returned through the forest, and completed our collection by a raid upon the cabbage-palms, that we gathered

from the tops of the trees, little beans that I recognised as the "abrou" of the Malays, and yams of a superior quality.

We were loaded when we reached the boat. But Ned Land did not find his provisions sufficient. Fate, however, favoured us. Just as we were pushing off, he perceived several trees, from twenty-five to thirty feet high, a species of palm-tree.

At last, at five o'clock in the evening, loaded with our riches, we quitted the shore, and half an hour after we hailed the *Nautilus*. No one appeared on our arrival. The enormous iron-plated cylinder seemed deserted. The provisions embarked, I descended to my chamber, and after supper slept soundly.

The next day, 6th January, nothing new on board. Not a sound inside, not a sign of life. The boat rested along the edge, in the same place in which we had left it. We resolved to return to the island. Ned Land hoped to be more fortunate than on the day before with regard to the hunt, and wished to visit another part of the forest.

At dawn we set off. The boat, carried on by the waves that flowed to shore, reached the island in a few minutes.

We landed, and, thinking that it was better to give in to the Canadian, we followed Ned Land, whose long limbs threatened to distance us. He wound up the coast towards the west : then, fording some torrents, he gained the high plain that was bordered with admirable forests. Some kingfishers were rambling along the water-courses, but they would not let themselves be approached. Their circumspexion proved to me that these birds knew what to expect from bipeds of our species, and I concluded that, if the island was not inhabited, at least human beings occasionally frequented it.

After crossing a rather large prairie, we arrived at the skirts of a little wood that was enlivened by the songs and flight of a large number of birds.

"There are only birds," said Conseil.

"But they are eatable," replied the harpooner.

"I do not agree with you, friend Ned, for I see only parrots there."

"Friend Conseil," said Ned, gravely, "the parrot is like pheasant to those who have nothing else."

"And," I added, "this bird, suitably prepared, is worth knife and fork."

Indeed, under the thick foliage of this wood, a world of parrots were flying from branch to branch, only needing a careful education to speak the human language. For the moment, they were chattering with parrots of all colours, and grave cockatoos, who seemed to meditate upon some philosophical problem, whilst brilliant red lories passed like a piece of bunting carried away by the breeze, papuans, with the finest azure colours, and in all a variety of winged things most charming to behold, but few eatable.

However, a bird peculiar to these lands, and which has never passed the limits of the Arrow and Papuan islands, was wanting in this collection. But fortune reserved it for me before long.

After passing through a moderately thick copse, we found a plain obstructed with bushes. I saw then those magnificent birds, the disposition of whose long feathers obliges them to fly against the wind. Their undulating flight, graceful aerial curves, and the shading of their colours, attracted and charmed one's looks. I had no trouble in recognising them.

"Birds of paradise!" I exclaimed.

The Malays, who carry on a great trade in these birds with the Chinese, have several means that we could not employ for taking them. Sometimes they put snares on the top of high trees that the birds of paradise prefer to frequent. Sometimes they catch them with a viscous birdlime that paralyses their movements. They even go so far as to poison the fountains that the birds generally drink from. But we were obliged to fire at them during flight, which gave us few chances to bring them down; and, indeed, we vainly exhausted one half our ammunition.

About eleven o'clock in the morning, the first range of

mountains that form the centre of the island was traversed. and we had killed nothing. Hunger drove us on. The hunters had relied on the products of the chase, and they were wrong. Happily Conseil, to his great surprise, made a double shot and secured breakfast. He brought down a white pigeon and a wood-pigeon, which, cleverly plucked and suspended from a skewer, was roasted before a red fire of dead wood. While these interesting birds were cooking, Ned prepared the fruit of the bread-tree. Then the wood-pigeons were devoured to the bones, and declared excellent. The nutmeg, with which they are in the habit of stuffing their crops, flavours their flesh and renders it delicious eating.

"Now, Ned, what do you miss now?"

"Some four-footed game, M. Aronnax. All these pigeons are only side-dishes and trifles; and until I have killed an animal with cutlets I shall not be content."

"Nor I, Ned, if I do not catch a bird of paradise."

"Let us continue hunting," replied Conseil. "Let us go towards the sea. We have arrived at the first declivities of the mountains, and I think we had better regain the region of forests."

That was sensible advice, and was followed out. After walking for one hour we had attained a forest of sago-trees. Some inoffensive serpents glided away from us. The birds of paradise fled at our approach, and truly I despaired of getting near one when Conseil, who was walking in front, suddenly bent down, uttered a triumphal cry, and came back to me bringing a magnificent specimen.

"Ah! bravo, Conseil!"

"Master is very good."

"No, my boy; you have made an excellent stroke. Take one of these living birds, and carry it in your hand."

"If master will examine it, he will see that I have not deserved great merit."

"Why, Conseil?"

"Because this bird is as drunk as a quail."

“ Drunk ! ”

“ Yes, sir ; drunk with the nutmegs that it devoured under the nutmeg-tree, under which I found it. See, friend Ned, see the monstrous effects of intemperance ! ”

“ By Jove ! ” exclaimed the Canadian, “ because I have drunk gin for two months, you must needs reproach me ! ”

However, I examined the curious bird. Conseil was right. The bird, drunk with the juice, was quite powerless. It could not fly ; it could hardly walk.

This bird belonged to the most beautiful of the eight species that are found in Papua and in the neighbouring islands. It was the “ large emerald bird, the most rare kind.” It measured three feet in length. Its head was comparatively small, its eyes placed near the opening of the beak, and also small. But the shades of colour were beautiful, having a yellow beak, brown feet and claws, nut-coloured wings with purple tips, pale yellow at the back of the neck and head, and emerald colour at the throat, chestnut on the breast and belly. Two horned, downy nets rose from below the tail, that prolonged the long light feathers of admirable fineness, and they completed the whole of this marvellous bird, that the natives have poetically named the “ bird of the sun.”

But if my wishes were satisfied by the possession of the bird of paradise, the Canadian’s were not yet. Happily, about two o’clock, Ned Land brought down a magnificent hog, from the brood of those the natives call “ bari-outang.” The animal came in time for us to procure real quadruped meat, and he was well received. Ned Land was very proud of his shot. The hog, hit by the electric ball, fell stone dead. The Canadian skinned and cleaned it properly, after having taken half a dozen cutlets, destined to furnish us with a grilled repast in the evening. Then the hunt was resumed, which was still more marked by Ned and Conseil’s exploits.

Indeed, the two friends, beating the bushes, roused a herd of kangaroos that fled and bounded along on their elastic

paws. But these animals did not take to flight so rapidly but what the electric capsule could stop their course.

"Ah, Professor!" cried Ned Land, who was carried away by the delights of the chase, "what excellent game, and stewed, too! What a supply for the *Nautilus*! Two! three! five down! And to think that we shall eat that flesh, and that the idiots on board shall not have a crumb!"

I think that, in the excess of his joy, the Canadian, if he had not talked so much, would have killed them all. But he contented himself with a single dozen of these interesting marsupians. These animals were small. They were a species of those "kangaroo rabbits" that live habitually in the hollows of trees, and whose speed is extreme; but they are moderately fat, and furnish, at least, estimable food. We were very satisfied with the results of the hunt. Happy Ned proposed to return to this enchanting island the next day, for he wished to depopulate it of all the eatable quadrupeds. But he had reckoned without his host.

At six o'clock in the evening we had regained the shore; our boat was moored to the usual place. The *Nautilus*, like a long rock, emerged from the waves two miles from the beach. Ned Land, without waiting, occupied himself about the important dinner business. He understood all about cooking well. The "bari-outang," grilled on the coals, soon scented the air with a delicious odour.

Indeed, the dinner was excellent. Two wood-pigeons completed this extraordinary menu. The sago pasty, the artocarpus bread, some mangoes, half a dozen pineapples, and the liquor fermented from some coco-nuts, overjoyed us. I even think that my worthy companions' ideas had not all the plainness desirable.

"Suppose we do not return to the *Nautilus* this evening?" said Conseil.

"Suppose we never return?" added Ned Land.

Just then a stone fell at our feet and cut short the harpooner's proposition.

CHAPTER XXI

CAPTAIN NEMO'S THUNDERBOLT

We looked at the edge of the forest without rising, my hand stopping in the action of putting it to my mouth, Ned Land's completing its office.

"Stones do not fall from the sky," remarked Conseil, "or they would merit the name of aerolites."

A second stone, carefully aimed, that made a savoury pigeon's leg fall from Conseil's hand, gave still more weight to his observation. We all three arose, shouldered our guns, and were ready to reply to any attack.

"Are they apes?" cried Ned Land.

"Very nearly—they are savages."

"To the boat!" I said, hurrying to the sea.

It was indeed necessary to beat a retreat, for about twenty natives armed with bows and slings appeared on the skirts of a copse that masked the horizon to the right, hardly a hundred steps from us.

Our boat was moored about sixty feet from us. The savages approached us, not running, but making hostile demonstrations. Stones and arrows fell thickly.

Ned Land had not wished to leave his provisions; and, in spite of his imminent danger, his pig on one side and kangaroos on the other, he went tolerably fast. In two minutes we were on the shore. To load the boat with provisions and arms, to push it out to sea, and ship the oars, was the work of an instant. We had not gone two cable-lengths, when a hundred savages, howling and gesticulating, entered the water up to their waists. I watched to see if their apparition would attract some men from the *Nautilus* on to the platform. But no. The enormous machine, lying off, was absolutely deserted.

Twenty minutes later we were on board. The panels were open. After making the boat fast, we entered into the interior of the *Nautilus*.

I descended to the drawing-room, from whence I heard some chords. Captain Nemo was there, bending over his organ, and plunged in a musical ecstasy.

"Captain!"

He did not hear me.

"Captain!" I said, touching his hand.

He shuddered, and, turning round, said, "Ah! it is you, Professor? Well, have you had a good hunt, have you botanised successfully?"

"Yes, Captain; but we have unfortunately brought a troop of bipeds, whose vicinity troubles me."

"What bipeds?"

"Savages."

"Savages!" he echoed, ironically. "So you are astonished, Professor, at having set foot on a strange land and finding savages? Savages! where are there not any? Besides, are they worse than others, these whom you call savages?"

"But Captain——"

"How many have you counted?"

"A hundred at least."

"M. Aronnax," replied Captain Nemo, placing his fingers on the organ stops, "when all the natives of Papua are assembled on this shore, the *Nautilus* will have nothing to fear from their attacks."

The Captain's fingers were then running over the keys of the instrument, and I remarked that he touched only the black keys, which gave his melodies an essentially Scotch character. Soon he had forgotten my presence, and had plunged into a reverie that I did not disturb. I went up again on to the platform: night had already fallen; for, in this low latitude, the sun sets rapidly and without twilight. I could only see the island indistinctly; but the numerous fires, lighted on the beach, showed that the natives did not think of leaving it. I was alone for several hours, sometimes thinking of the natives—but without any dread of them, for the imperturbable confidence of the Captain was

catching—sometimes forgetting them to admire the splendours of the night in the tropics. My remembrances went to France in the train of those zodiacal stars that would shine in some hours' time. The moon shone in the midst of the constellations of the zenith.

The night slipped away without any mischance, the islanders frightened no doubt at the sight of a monster aground in the bay. The panels were open, and would have offered an easy access to the interior of the *Nautilus*.

At six o'clock in the morning of the 8th January I went up on to the platform. The dawn was breaking. The island soon showed itself through the dissipating fogs, first the shore, then the summits.

The natives were there, more numerous than on the day before—five or six hundred perhaps—some of them, profiting by the low water, had come on to the coral, at less than two cable-lengths from the *Nautilus*. I distinguished them easily ; they were true Papuans, with athletic figures, men of good race, large high foreheads, large, but not broad and flat, and white teeth. Their woolly hair, with a reddish tinge, showed off on their black shining bodies like those of the Nubians. From the lobes of their ears, cut and distended, hung chaplets of bones. Most of these savages were naked. Amongst them, I remarked some women, dressed from the hips to knees in quite a crinoline of herbs, that sustained a vegetable waistband. Some chiefs had ornamented their necks with a crescent and collars of glass beads, red and white ; nearly all were armed with bows, arrows, and shields and carried on their shoulders a sort of net containing those round stones which they cast from their slings with great skill. One of these chiefs, rather near to the *Nautilus*, examined it attentively. He was, perhaps, a " mado " of high rank, for he was draped in a mat of banana-leaves, notched round the edges, and set off with brilliant colours.

I could easily have knocked down this native, who was within a short length ; but I thought that it was better to

wait for real hostile demonstrations. Between Europeans and savages, it is proper for the Europeans to parry sharply, not to attack.

During low water the natives roamed about near the *Nautilus*, but were not troublesome ; I heard them frequently repeat the word " Assai," and by their gestures I understood that they invited me to go on land, an invitation that I declined.

So that, on that day, the boat did not push off, to the great displeasure of Master Land, who could not complete his provisions.

This adroit Canadian employed his time in preparing the viands and meat that he had brought off the island. As for the savages, they returned to the shore about eleven o'clock in the morning, as soon as the coral tops began to disappear under the rising tide ; but I saw their numbers had increased considerably on the shore. Probably they came from the neighbouring islands, or very likely from Papua. However, I had not seen a single native canoe. Having nothing better to do, I thought of dragging these beautiful limpid waters, under which I saw a profusion of shells, zoophytes, and marine plants. Moreover, it was the last day that the *Nautilus* would pass in these parts, if it float in open sea the next day, according to Captain Nemo's promise.

I therefore called Conseil, who brought me a little light drag, very like those for the oyster fishery. Now to work ! For two hours we fished unceasingly, but without bringing up any rarities. The drag was filled with midas-ears, harps, melames, and particularly the most beautiful hammers I have ever seen. We also brought up some sea-slugs, pearl-oysters, and a dozen little turtles that were reserved for the pantry on board.

But just when I expected it least, I put my hand on a wonder, I might say a natural deformity, very rarely met with. Conseil was just dragging, and his net came up filled with divers ordinary shells, when, all at once, he saw me

plunge my arm quickly into the net, to draw out a shell, and heard me utter a cry.

"What is the matter, sir?" he asked in surprise. "Has master been bitten?"

"No, my boy; but I would willingly have given a finger for my discovery."

"What discovery?"

"This shell," I said, holding up the object of my triumph.

"It is simply an olive porphry."

"Yes, Conseil; but, instead of being rolled from right to left, this olive turns from left to right."

"Is it possible?"

"Yes, my boy; it is a left shell."

Shells are all right-handed, with rare exceptions; and, when by chance their spiral is left, amateurs are ready to pay their weight in gold.

Conseil and I were absorbed in the contemplation of our treasure, and I was promising myself to enrich the museum with it, when a stone unfortunately thrown by a native struck against, and broke, the precious object in Conseil's hand. I uttered a cry of despair! Conseil took up his gun, and aimed at a savage who was poisoning his sling at ten yards from him. I would have stopped him, but his blow took effect and broke the bracelet of amulets which encircled the arm of the savage.

"Conseil!" cried I. "Conseil!"

"Well, sir! do you not see that the cannibal has commenced the attack?"

"A shell is not worth the life of a man," said I.

"Ah! the scoundrel!" cried Conseil; "I would rather he had broken my shoulder!"

Conseil was in earnest, but I was not of his opinion. However, the situation had changed some minutes before, and we had not perceived. A score of canoes surrounded the *Nautilus*. These canoes, scooped out of the trunk of a tree, long, narrow, well adapted for speed, were balanced by means of a long bamboo pole, which floated on the

water. They were managed by skilful, half-naked paddlers, and I watched their advance with some uneasiness. It was evident that these Papuans had already had dealings with the Europeans and knew their ships. But this long iron cylinder anchored in the bay, without masts or chimneys, what could they think of it? Nothing good, for at first they kept at a respectful distance. However, seeing it motionless, by degrees they took courage, and sought to familiarise themselves with it. Now this familiarity was precisely what it was necessary to avoid. Our arms, which were noiseless, could only produce a moderate effect on the savages, who have little respect for aught but blustering things. The thunderbolt without the reverberations of thunder would frighten man but little, though the danger lies in the lightning, not in the noise.

At this moment the canoes approached the *Nautilus*, and a shower of arrows alighted on her.

I went down to the saloon, but found no one there. I ventured to knock at the door that opened into the Captain's room. "Come in," was the answer.

I entered, and found Captain Nemo deep in algebraical calculations of x and other quantities.

"I am disturbing you," said I, for courtesy's sake.

"That is true, M. Aronnax," replied the Captain; "but I think you have serious reasons for wishing to see me?"

"Very grave ones; the natives are surrounding us in their canoes, and in a few minutes we shall certainly be attacked by many hundreds of savages."

"Ah!" said Captain Nemo quietly, "they are come with their canoes?"

"Yes, sir."

"Well, sir, we must close the hatches."

"Exactly, and I came to say to you——"

"Nothing can be more simple," said Captain Nemo. And, pressing an electric button, he transmitted an order to the ship's crew.

"It is all done, sir," said he, after some moments.

"The pinnacle is ready, and the hatches are closed. You do not fear, I imagine, that these gentlemen could stave in walls on which the balls of your frigate have had no effect?"

"No, Captain; but a danger still exists."

"What is that, sir?"

"It is that to-morrow, at about this hour, we must open the hatches to renew the air of the *Nautilus*. Now, if, at this moment, the Papuans should occupy the platform, I do not see how you could prevent them from entering."

"Then, sir, you suppose that they will board us?"

"I am certain of it."

"Well, sir, let them come. I see no reason for hindering them. After all, these Papuans are poor creatures, and I am unwilling that my visit to the island should cost the life of a single one of these wretches."

Upon that I was going away; but Captain Nemo detained me, and asked me to sit down by him. He questioned me with interest about our excursions on shore, and our hunting; and seemed not to understand the craving for meat that possessed the Canadian. Then the conversation turned on various subjects, and, without being more communicative, Captain Nemo showed himself more amiable.

Amongst other things, we happened to speak of the situation of the *Nautilus*, run aground in exactly the same spot in this strait where Dumont d'Urville was nearly lost. Apropos of this:

"This D'Urville was one of your great sailors," said the Captain to me, "one of your most intelligent navigators. He is the Captain Cook of you Frenchmen. Unfortunate man of science, after having braved the icebergs of the South Pole, the coral reefs of Oceania, the cannibals of the Pacific, to perish miserably in a railway train! If this energetic man could have reflected during the last moments of his life, what must have been uppermost in his last thoughts, do you suppose?"

So speaking, Captain Nemo seemed moved, and his emotion gave me a better opinion of him. Then, chart in hand, we reviewed the travels of the French navigator, his voyages of circumnavigation, his double detention at the South Pole, which led to the discovery of Adelaide and Louis Philippe, and fixing the hydrographical bearings of the principal islands of Oceania.

"That which your D'Urville has done on the surface of the seas," said Captain Nemo, "that have I done under them, and more easily, more completely than he. The *Astrolabe* and the *Zélée*, incessantly tossed about by the hurricane, could not be worth the *Nautilus*, quiet repository of labour that she is, truly motionless in the midst of the waters."

"To-morrow," added the Captain, rising, "to-morrow, at twenty minutes to three p.m., the *Nautilus* shall float, and leave the Strait of Torres uninjured."

Having curtly pronounced these words, Captain Nemo bowed slightly. This was to dismiss me, and I went back to my room.

There I found Conseil, who wished to know the result of my interview with the Captain.

"My boy," said I, "when I feigned to believe that his *Nautilus* was threatened by the natives of Papua, the Captain answered me very sarcastically. I have but one thing to say to you : Have confidence in him, and go to sleep in peace."

"Have you no need of my services, sir ?"

"No, my friend. What is Ned Land doing ?"

"If you will excuse me, sir," answered Conseil, "friend Ned is busy making a kangaroo-pie which will be a marvel."

I remained alone and went to bed, but slept indifferently. I heard the noise of the savages, who stamped on the platform, uttering deafening cries. The night passed thus, without disturbing the ordinary repose of the crew. The presence of these cannibals affected them no more

than the soldiers of a masked battery care for the ants that crawl over its front.

At six in the morning I rose. The hatches had not been opened. The inner air was not renewed, but the reservoirs, filled ready for any emergency, were now resorted to, and discharged several cubic feet of oxygen into the exhausted atmosphere of the *Nautilus*.

I worked in my room till noon, without having seen Captain Nemo, even for an instant. On board no preparations for departure were visible.

I waited still some time, then went into the large saloon. The clock marked half-past two. In ten minutes it would be high-tide : and, if Captain Nemo had not made a rash promise, the *Nautilus* would be immediately detached. If not, many months would pass ere she could leave her bed of coral.

However, some warning vibrations began to be felt in the vessel. I heard the keel grating against the rough calcareous bottom of the coral reef.

At five-and-twenty minutes to three, Captain Nemo appeared in the saloon.

"We are going to start," said he.

"Ah !" replied I.

"I have given the order to open the hatches."

"And the Papuans ?"

"The Papuans ?" answered Captain Nemo, slightly shrugging his shoulders.

"Will they not come inside the *Nautilus* ?"

"How ?"

"Only by leaping over the hatches you have opened."

"M. Aronnax," quietly answered Captain Nemo, "they will not enter the hatches of the *Nautilus* in that way, even if they were open."

I looked at the Captain.

"You do not understand ?" said he.

"Hardly."

"Well, come and you will see."

I directed my steps towards the central staircase. There Ned Land and Conseil were slyly watching some of the ship's crew, who were opening the hatches, while cries of rage and fearful vociferations resounded outside.

The port lids were pulled down outside. Twenty horrible faces appeared. But the first native who placed his hand on the stair-rail, struck from behind by some invisible force, I know not what, fled, uttering the most fearful cries and making the wildest contortions.

Ten of his companions followed him. They met with the same fate.

Conseil was in ecstasy. Ned Land, carried away by his violent instincts, rushed on to the staircase. But the moment he seized the rail with both hands, he, in his turn, was overthrown.

"I am struck by a thunderbolt," cried he, with an oath.

This explained all. It was no rail ; but a metallic cable charged with electricity from the deck communicating with the platform. Whoever touched it felt a powerful shock—and this shock would have been mortal if Captain Nemo had discharged into the conductor the whole force of the current. It might truly be said that between his assailants and himself he had stretched a network of electricity which none could pass with impunity.

Meanwhile, the exasperated Papuans had beaten a retreat paralysed with terror. As for us, half laughing, we consoled and rubbed the unfortunate Ned Land, who swore like one possessed.

But at this moment the *Nautilus*, raised by the last waves of the tide, quitted her coral bed exactly at the fortieth minute fixed by the Captain. Her screw swept the waters slowly and majestically. Her speed increased gradually, and, sailing on the surface of the ocean, she quitted safe and sound the dangerous passes of the Straits of Torres.

CHAPTER XXIII

“ÆGRI SOMNIA”

The following day, 10th January, the *Nautilus* continued her course between two seas, but with such remarkable speed that I could not estimate it at less than thirty-five miles an hour. The rapidity of her screw was such that I could neither follow nor count its revolutions. When I reflected that this marvellous electric agent, after having afforded motion, heat, and light to the *Nautilus*, still protected her from outward attack, and transformed her into an ark of safety which no profane hand might touch without being thunderstricken, my admiration was unbounded, and from the structure it extended to the engineer who had called it into existence.

Our course was directed to the west, and on 11th of January we doubled Cape Wessel, situated in 135° long. and 10° N. lat., which forms the east point of the Gulf of Carpentaria. The reefs were still numerous, but more equalised, and marked on the chart with extreme precision. The *Nautilus* easily avoided the breakers of Money to port and the Victoria reefs to starboard, placed at 130° long. and on the 10th parallel, which we strictly followed.

On the 13th of January, Captain Nemo arrived in the Sea of Timor, and recognised the island of that name in 122° long.

From this point the direction of the *Nautilus* inclined towards the south-west. Her head was set for the Indian Ocean. Where would the fancy of Captain Nemo carry us next? Would he return to the coast of Asia or would he approach again the shores of Europe? Improbable conjectures both, to a man who fled from inhabited continents. Then would he descend to the south? Was he going to double the Cape of Good Hope, then Cape Horn, and finally go as far as the Antarctic pole? Would he come back at last to the Pacific, where his *Nautilus* could sail free and independently? Time would show.

After having skirted the sands of Cartier, of Hibernia, Seringapatam, and Scott, last efforts of the solid against the liquid element, on the 14th of January we lost sight of land altogether. The speed of the *Nautilus* was considerably abated, and with irregular course she sometimes swam in the bosom of the waters, sometimes floated on their surface.

During this period of the voyage, Captain Nemo made some interesting experiments on the varied temperature of the sea, in different beds. Under ordinary conditions these observations are made by means of rather complicated instruments, and with somewhat doubtful results, by means of thermometrical sounding-leads, the glasses often breaking under the pressure of the water, or an apparatus grounded on the variations of the resistance of metals to the electric currents. Results so obtained could not be correctly calculated. On the contrary, Captain Nemo went himself to test the temperature in the depths of the sea, and his thermometer, placed in communication with the different sheets of water, gave him the required degree immediately and accurately.

It was thus that, either by overloading her reservoirs or by descending obliquely by means of her inclined planes, the *Nautilus* successively attained the depth of three, four, five, seven, nine, and ten thousand yards, and the definite result of this experience was that the sea preserved an average temperature of four degrees and a half at a depth of five thousand fathoms under all latitudes.

On the 16th of January, the *Nautilus* seemed becalmed only a few yards beneath the surface of the waves. Her electric apparatus remained inactive and her motionless screw left her to drift at the mercy of the currents. I supposed that the crew was occupied with interior repairs, rendered necessary by the violence of the mechanical movements of the machine.

My companions and I then witnessed a curious spectacle. The hatches of the saloon were open, and, as the

beacon-light of the *Nautilus* was not in action, a dim obscurity reigned in the midst of the waters. I observed the state of the sea under these conditions, and the largest fish appeared to me no more than scarcely defined shadows, when the *Nautilus* found herself suddenly transported into full light. I thought at first that the beacon had been lighted, and was casting its electric radiance into the liquid mass. I was mistaken, and after a rapid survey perceived my error.

The *Nautilus* floated in the midst of a phosphorescent bed which, in this obscurity, became quite dazzling. It was produced by myriads of luminous animalculæ, whose brilliancy was increased as they glided over the metallic hull of the vessel. I was surprised by lightning in the midst of these luminous sheets, as though they had been rivulets of lead melted in an ardent furnace or metallic masses brought to a white heat, so that, by force of contrast, certain portions of light appeared to cast a shade in the midst of the general ignition, from which all shade seemed banished. No ; this was not the calm irradiation of our ordinary lightning. There was unusual life and vigour : this was truly living light !

In reality, it was an infinite agglomeration of coloured infusoria, of veritable globules of jelly, provided with a threadlike tentacle, and of which as many as twenty-five thousand have been counted in less than two cubic half-inches of water.

During several hours the *Nautilus* floated in these brilliant waves, and our admiration increased as we watched the marine monsters disporting themselves like salamanders. I saw there in the midst of this fire that burns not the swift and elegant porpoise (the indefatigable clown of the ocean), and some swordfish ten feet long, those prophetic heralds of the hurricane whose formidable sword would now and then strike the glass of the saloon. Then appeared the smaller fish, the balista, the leaping mackerel, wolf-thorn-tails, and a hundred others which striped the luminous

atmosphere as they swam. This dazzling spectacle was enchanting ! Perhaps some atmospheric condition increased the intensity of this phenomenon. Perhaps some storm agitated the surface of the waves. But at this depth of some yards, the *Nautilus* was unmoved by its fury and reposed peacefully in still water.

So we progressed, incessantly charmed by some new marvel. The days passed rapidly away, and I took no account of them. Ned, according to habit, tried to vary the diet on board. Like snails, we were fixed to our shells, and I declare it is easy to lead a snail's life.

Thus this life seemed easy and natural, and we thought no longer of the life we led on land ; but something happened to recall us to the strangeness of our situation.

On the 18th of January, the *Nautilus* was in 105° long. and 15° S. lat. The weather was threatening, the sea rough and rolling. There was a strong east wind. The barometer, which had been going down for some days, foreboded a coming storm. I went up on to the platform just as the second lieutenant was taking the measure of the horary angles, and waited, according to habit, till the daily phrase was said. But on this day it was exchanged for another phrase not less incomprehensible. Almost directly, I saw Captain Nemo appear with a glass, looking towards the horizon.

For some minutes he was immovable, without taking his eye off the point of observation. Then he lowered his glass and exchanged a few words with his lieutenant. The latter seemed to be a victim to some emotion that he tried in vain to repress. Captain Nemo, having more command over himself, was cool. He seemed, too, to be making some objections to which the lieutenant replied by formal assurances. At least I concluded so by the difference of their tones and gestures. For myself, I had looked carefully in the direction indicated without seeing anything. The sky and water were lost in the clear line of the horizon.

However, Captain Nemo walked from one end of the

platform to the other, without looking at me, perhaps without seeing me. His step was firm, but less regular than usual. He stopped sometimes, crossed his arms, and observed the sea. What could he be looking for on that immense expanse ?

The *Nautilus* was then some hundreds of miles from the nearest coast.

The lieutenant had taken up the glass and examined the horizon steadfastly, going and coming, stamping his foot and showing more nervous agitation than his superior officer. Beside, this mystery must necessarily be solved, and before long ; for, upon an order from Captain Nemo, the engine, increasing its propelling power, made the screw turn more rapidly.

Just then the lieutenant drew the Captain's attention again. The latter stopped walking and directed his glass towards the place indicated. He looked long. I felt very much puzzled, and descended to the drawing-room, and took out an excellent telescope that I generally used. Then, leaning on the cage of the watch-light that jutted out from the front of the platform, set myself to look over all the line of the sky and sea.

But my eye was no sooner applied to the glass than it was quickly snatched out of my hands.

I turned round. Captain Nemo was before me, but I did not know him. His face was transfigured. His eyes flashed sullenly ; his teeth were set ; his stiff body, clenched fists, and head shrunk between his shoulders, betrayed the violent agitation that pervaded his whole frame. He did not move. My glass, fallen from his hands, had rolled at his feet.

Had I unwittingly provoked this fit of anger ? Did this incomprehensible person imagine that I had discovered some forbidden secret ? No ; I was not the object of this hatred, for he was not looking at me ; his eye was steadily fixed upon the impenetrable point of the horizon. At last Captain Nemo recovered himself. His agitation subsided. He addressed some words in a foreign language to his lieutenant, then turned to me. " M. Aronnax," he said,

in rather an imperious tone, "I require you to keep one of the conditions that bind you to me."

"What is it, Captain?"

"You must be confined, with your companions, until I think fit to release you."

"You are the master," I replied, looking steadily at him. "But may I ask you one question?"

"None, sir."

There was no resisting this imperious command, it would have been useless. I went down to the cabin occupied by Ned Land and Conseil, and told them the Captain's determination. You may judge how this communication was received by the Canadian.

But there was no time for altercation. Four of the crew waited at the door, and conducted us to that cell where we had passed our first night on board the *Nautilus*.

Ned Land would have remonstrated, but the door was shut upon him.

"Will master tell me what this means?" asked Conseil.

I told my companions what had passed. They were as much astonished as I, and equally at a loss how to account for it.

Meanwhile, I was absorbed in my own reflections, and could think of nothing but the strange fear depicted in the Captain's countenance. I was utterly at a loss to account for it, when my cogitations were disturbed by these words from Ned Land:

"Hallo! breakfast is ready."

And indeed the table was laid. Evidently Captain Nemo had given this order at the same time that he had hastened the speed of the *Nautilus*.

"Will master permit me to make a recommendation?" asked Conseil.

"Yes, my boy."

"Well, it is that master breakfasts. It is prudent, for we do not know what may happen."

"You are right, Conseil."

"Unfortunately," said Ned Land, "they have only given us the ship's fare."

"Friend Ned," asked Conseil, "what would you have said if the breakfast had been entirely forgotten?"

This argument cut short the harpooner's recriminations.

We sat down to table. The meal was eaten in silence.

Just then the luminous globe that lighted the cell went out, and left us in total darkness. Ned Land was soon asleep, and what astonished me was that Conseil went off into a heavy slumber. I was thinking what could have caused his irresistible drowsiness, when I felt my brain becoming stupefied. In spite of my efforts to keep my eyes open, they would close. A painful suspicion seized me. Evidently soporific substances had been mixed with the food we had just taken. Imprisonment was not enough to conceal Captain Nemo's projects from us, sleep was more necessary.

I then heard the panels shut. The undulations of the sea, which caused a slight rolling motion, ceased. Had the *Nautilus* quitted the surface of the ocean? Had it gone back to the motionless bed of water. I tried to resist sleep. It was impossible. My breathing grew weak. I felt a mortal cold freeze my stiffened and half-paralysed limbs. My eyelids, like leaden caps, fell over my eyes. I could not raise them; a morbid sleep, full of hallucinations, bereft me of my being. Then the visions disappeared, and left me in complete insensibility.

CHAPTER XXIV

THE CORAL KINGDOM

The next day I woke with my head singularly clear. To my great surprise, I was in my own room. My companions, no doubt, had been reinstated in their cabin, without having perceived it any more than I. Of what had passed during the night they were as ignorant as I was, and to penetrate this mystery I only reckoned upon the chances of the future.

I then thought of quitting my room. Was I free again or a prisoner? Quite free. I opened the door, went to the half-deck, went up the central stairs. The panels, shut the evening before, were open. I went on to the platform.

Ned Land and Conseil waited there for me. I questioned them; they knew nothing. Lost in a heavy sleep in which they had been totally unconscious, they had been astonished at finding themselves in their cabin.

As for the *Nautilus*, it seemed quiet and mysterious as ever. It floated on the surface of the waves at a moderate pace. Nothing seemed changed on board.

The second lieutenant then came on to the platform, and gave the usual order below.

As for Captain Nemo, he did not appear.

Of the people on board, I only saw the impassive steward, who served me with his usual dumb regularity.

About two o'clock, I was in the drawing-room, busied in arranging my notes, when the Captain opened the door and appeared. I bowed. He made a slight inclination in return, without speaking. I resumed my work, hoping that he would perhaps give me some explanation of the events of the preceding night. He made none. I looked at him. He seemed fatigued; his heavy eyes had not been refreshed by sleep; his face looked very sorrowful. He walked to and fro, sat down and got up again, took a chance book, put it down, consulted his instruments without taking his habitual notes, and seemed restless and uneasy. At last, he came up to me, and said:

"Are you a doctor, M. Aronnax?"

I so little expected such a question that I stared some time at him without answering.

"Are you a doctor?" he repeated. "Several of your colleagues have studied medicine."

"Well," said I, "I am a doctor and resident surgeon to the hospital. I practised several years before entering the museum."

"Very well, sir."

My answer had evidently satisfied the Captain. But, not knowing what he would say next, I waited for other questions, reserving my answers according to circumstances.

"M. Aronnax, will you consent to prescribe for one of my men?" he asked.

"Is he ill?"

"Yes."

"I am ready to follow you."

"Come, then."

I own my heart beat, I do not know why. I saw certain connection between the illness of one of the crew and the events of the day before; and this mystery interested me at least as much as the sick man.

Captain Nemo conducted me to the poop of the *Nautilus*, and took me into a cabin situated near the sailors' quarters.

There, on a bed, lay a man about forty years of age, with a resolute expression of countenance, a true type of an Anglo-Saxon.

I leant over him. He was not only ill, he was wounded. His head, swathed in bandages covered with blood, lay on a pillow. I undid the bandages, and the wounded man looked at me with his large eyes and gave no sign of pain as I did it. It was a horrible wound. The skull, shattered by some deadly weapon, left the brain exposed, which was much injured. Clots of blood had formed in the bruised and broken mass, in colour like the dregs of wine.

There was both contusion and suffusion of the brain. His breathing was slow, and some spasmodic movements of the muscles agitated his face. I felt his pulse. It was intermittent. The extremities of the body were growing cold already, and I saw death must inevitably ensue. After dressing the unfortunate man's wounds, I readjusted the bandages on his head, and turned to Captain Nemo.

"What caused this wound?" I asked.

"What does it signify?" he replied, evasively. "A shock has broken one of the levers of the engine, which struck myself. But your opinion as to his state?"

I hesitated before giving it.

"You may speak," said the Captain. "This man does not understand French."

I gave a last look at the wounded man.

"He will be dead in two hours."

"Can nothing save him?"

"Nothing."

Captain Nemo's hand contracted, and some tears glistened in his eyes, which I thought incapable of shedding any.

For some moments I still watched the dying man, whose life ebbed slowly. His pallor increased under the electric light that was shed over his death-bed. I looked at his intelligent forehead, furrowed with premature wrinkles, produced probably by misfortune and sorrow. I tried to learn the secret of his life from the last words that escaped his lips.

"You can go now, M. Aronnax," said the Captain.

I left him in the dying man's cabin, and returned to my room much affected by this scene. During the whole day, I was haunted by uncomfortable suspicions, and at night I slept badly, and between my broken dreams I fancied I heard distant sighs like the notes of a funeral psalm. Were they the prayers of the dead, murmured in that language that I could not understand?

The next morning I went on to the bridge. Captain Nemo was there before me. As soon as he perceived me he came to me.

"Professor, will it be convenient to you to make a submarine excursion to-day?"

"With my companions?" I asked.

"If they like."

"We obey your orders, Captain."

"Will you be so good then as to put on your cork jackets?"

It was not a question of dead or dying. I rejoined Ned Land and Conseil, and told them of Captain Nemo's

proposition. Conseil hastened to accept it, and this time the Canadian seemed quite willing to follow our example.

It was eight o'clock in the morning. At half-past eight we were equipped for this new excursion, and provided with two contrivances for light and breathing. The double door was open ; and, accompanied by Captain Nemo, who was followed by a dozen of the crew, we set foot, at a depth of about thirty feet, on the solid bottom on which the *Nautilus* rested.

A slight declivity ended in an uneven bottom, at fifteen fathoms depth. This bottom differed entirely from the one I had visited on my first excursion under the waters of the Pacific Ocean. Here, there was no fine sand, no submarine prairies, no sea-forest. I immediately recognised that marvellous region in which, on that day, the Captain did the honours to us. It was the coral kingdom.

The light produced a thousand charming varieties, playing in the midst of the branches that were so vividly coloured. I seemed to see the membraneous and cylindrical tubes tremble beneath the undulation of the waters. I was tempted to gather their fresh petals, ornamented with delicate tentacles, some just blown, the others budding, while a small fish, swimming swiftly, touched them slightly, like flights of birds. But if my hand approached these living flowers, these animated, sensitive plants, the whole colony took alarm. The white petals re-entered their red cases, the flowers faded as I looked, and the bush changed into a block of stony knobs.

Chance had thrown me just by the most precious specimens of this zoophyte. This coral was more valuable than that found in the Mediterranean, on the coasts of France, Italy, and Barbary. Its tints justified the poetical names of "Flower of Blood," and "Froth of Blood," that trade has given to its most beautiful productions. Coral is sold for £20 per ounce ; and in this place the watery beds would make the fortunes of a company of coral-divers. This precious matter, often confused with other polypi, formed

then the inextricable plots called "macciota," and on which I noticed several beautiful specimens of pink coral.

Real petrified thickets, long joists of fantastic architecture, were disclosed before us. Captain Nemo placed himself under a dark gallery, where by a slight declivity we reached a depth of a hundred yards. The light from our lamps produced sometimes magical effects, following the rough outlines of the natural arches and pendants disposed like lustres, that were tipped with points of fire.

At last, after walking two hours, we had attained a depth of about three hundred yards, that is to say, the extreme limit on which coral begins to form. But there was no isolated bush, nor modest brushwood, at the bottom of lofty trees. It was an immense forest of large mineral vegetations, enormous petrified trees, united by garlands of elegant sea-bindweed, all adorned with clouds and reflections. We passed freely under their high branches, lost in the shade of the waves.

Captain Nemo had stopped. I and my companions halted, and, turning round, I saw his men were forming a semicircle round their chief. Watching attentively, I observed that four of them carried on their shoulders an object of an oblong shape.

We occupied, in this place, the centre of a vast glade surrounded by the lofty foliage of the submarine forest. Our lamps threw over this place a sort of clear twilight that singularly elongated the shadows on the ground. At the end of the glade the darkness increased, and was only relieved by little sparks reflected by the points of coral.

Ned Land and Conseil were near me. We watched, and I thought I was going to witness a strange scene. On observing the ground, I saw that it was raised in certain places by slight excrescences encrusted with limy deposits, and disposed with a regularity that betrayed the hand of man.

In the midst of the glade, on a pedestal of rocks roughly piled up, stood a cross of coral that extended its long arms

that one might have thought were made of petrified blood.

Upon a sign from Captain Nemo one of the men advanced ; and at some feet from the cross he began to dig a hole with a pickaxe that he took from his belt. I understood all ! This glade was a cemetery, this hole a tomb, this oblong object the body of the man who had died in the night ! The Captain and his men had come to bury their companion in this general resting-place, at the bottom of this inaccessible ocean !

The grave was being dug slowly ; the fish fled on all sides while their retreat was being thus disturbed ; I heard the strokes of the pickaxe, which sparkled when it hit upon some flint lost at the bottom of the waters. The hole was soon large and deep enough to receive the body. Then the bearers approached ; the body, enveloped in a tissue of white linen, was lowered into the damp grave. Captain Nemo, with his arms crossed on his breast, and all the friends of him who had loved them, knelt in prayer.

The grave was then filled in with the rubbish taken from the ground, which formed a slight mound. When this was done, Captain Nemo and his men rose ; then, approaching the grave, they knelt again, and all extended their hands in sign of a last adieu. Then the funeral procession returned to the *Nautilus*, passing under the arches of the forest, in the midst of thickets, along the coral bushes, and still on the ascent. At last the light of the ship appeared, and its luminous track guided us to the *Nautilus*. At one o'clock we had returned.

As soon as I had changed my clothes I went up on to the platform, and, a prey to conflicting emotions, I sat down near the binnacle. Captain Nemo joined me. I rose and said to him :

“ So, as I said he would, this man died in the night ? ”

“ Yes, M. Arronax.”

“ And he rests now, near his companions, in the coral cemetery ? ”

“ Yes, forgotten by all else, but not by us. We dug the

grave, and the polypi undertake to seal our dead for eternity." And, burying his face quickly in his hands, he tried in vain to suppress a sob. Then he added : " Our peaceful cemetery is there, some hundred feet below the surface of the waves."

" Your dead sleep quietly, at least, Captain, out of the reach of sharks."

" Yes, sir, of sharks and *men*," gravely replied the Captain.

PART TWO

CHAPTER I

THE INDIAN OCEAN

We now come to the second part of our journey under the sea. The first ended with the moving scene in the coral cemetery which left such a deep impression on my mind. Thus, in the midst of this great sea, Captain Nemo's life was passing, even to his grave, which he had prepared in one of its deepest abysses. There, not one of the ocean's monsters could trouble the last sleep of the crew of the *Nautilus*, of those friends riveted to each other in death as in life. "Nor any man, either," had added the Captain. Still the same fierce, implacable defiance towards human society !

I could no longer content myself with the theory which satisfied Conseil.

That worthy fellow persisted in seeing in the Commander of the *Nautilus* one of those unknown servants who return mankind contempt for indifference. For him, he was a misunderstood genius who, tired of earth's deceptions, had taken refuge in this inaccessible medium, where he might follow his instincts freely. To my mind, this explains but one side of Captain Nemo's character. Indeed, the mystery of that last night during which we had been chained in prison, the sleep, and the precaution so violently taken by the Captain of snatching from my eyes the glass I had raised to sweep the horizon, the mortal wound of the man, due to an unaccountable shock of the *Nautilus*, all put me on a new track. No ; Captain Nemo was not satisfied with shunning man. His formidable apparatus not only suited his instinct of freedom, but perhaps also the design of some terrible retaliation.

At this moment nothing is clear to me ; I catch but a glimpse of light amidst all the darkness, and I must confine myself to writing as events shall dictate.

That day, the 24th of January, 1868, at noon, the second officer came to take the altitude of the sun. I mounted the platform, lit a cigar, and watched the operation. It seemed to me that the man did not understand French ; for several times I made remarks in a loud voice, which must have drawn from him some involuntary sign of attention, if he had understood them ; but he remained undisturbed and dumb.

As he was taking observations with the sextant, one of the sailors of the *Nautilus* (the strong man who had accompanied us on our first submarine excursion to the Island of Crespo) came to clean the glasses of the lantern. I examined the fittings of the apparatus, the strength of which was increased a hundredfold by lenticular rings, placed similar to those in a lighthouse, and which projected their brilliance in a horizontal plane. The electric lamp was combined in such a way as to give its most powerful light. Indeed, it was produced *in vacuo*, which insured both its steadiness and its intensity. This vacuum economised the graphite points between which the luminous arc was developed—an important point of economy for Captain Nemo, who could not easily have replaced them ; and under these conditions their waste was imperceptible. When the *Nautilus* was ready to continue its submarine journey, I went down to the saloon. The panel was closed, and the course marked direct west.

We were furrowing the waters of the Indian Ocean, a vast liquid plain, with a surface of 1,200,000,000 of acres, and whose waters are so clear and transparent that any one leaning over them would turn giddy. The *Nautilus* usually floated between fifty and a hundred fathoms deep. We went on so for some days. To anyone but myself, who had a great love for the sea, the hours would have seemed long and monotonous ; but the daily walks on the platform, when I steeped myself in the reviving air of the ocean, the sight of the rich waters through the windows of the saloon, the books in the library, the compiling of my memoirs, took up

all my time, and left me not a moment of ennui or weariness.

For some days we saw a great number of aquatic birds, sea-mews or gulls. Some were cleverly killed and, prepared in a certain way, made very acceptable water-game. Amongst large-winged birds, carried a long distance from all lands and resting upon the waves from the fatigue of their flight, I saw some magnificent albatrosses, uttering discordant cries like the braying of an ass, and birds belonging to the family of the long-wings.

As to the fish, they always provoked our admiration when we surprised the secrets of their aquatic life through the open panels. I saw many kinds which I never before had a chance of observing.

From the 21st to the 23rd of January the *Nautilus* went at the rate of two hundred and fifty leagues in twenty-four hours, being five hundred and forty miles, or twenty-two miles an hour. If we recognised so many different varieties of fish, it was because, attracted by the electric light, they tried to follow us : the greater part, however, were soon distanced by our speed, though some kept their place in the waters of the *Nautilus* for a time. The morning of the 24th, in $12^{\circ} 5' \text{ S. lat.}$, and $94^{\circ} 33' \text{ long.}$, we observed Keeling Island, a coral formation, planted with magnificent cocos, and which had been visited by Mr. Darwin and Captain Fitzroy. The *Nautilus* skirted the shores of this desert island for a little distance. Its nets brought up numerous specimens of polypi and curious shells of mollusca.

Soon Keeling Island disappeared from the horizon, and our course was directed to the north-west in the direction of the Indian Peninsula.

From Keeling Island our course was slower and more variable, often taking us into great depths. Several times they made use of the inclined planes, which certain internal levers placed obliquely to the waterline. In that way we went about two miles, but without ever obtaining the

greatest depths of the Indian Sea, which soundings of seven thousand fathoms have never reached. As to the temperature of the lower strata, the thermometer invariably indicated 4° above zero. I only observed that in the upper regions the water was always colder in the high levels than at the surface of the sea.

On the 25th of January the ocean was entirely deserted ; the *Nautilus* passed the day on the surface, beating the waves with its powerful screw and making them rebound to a great height. Who under such circumstances would not have taken it for a gigantic cetacean ? Three parts of this day I spent on the platform. I watched the sea. Nothing on the horizon, till about four o'clock a steamer running west on our counter. Her masts were visible for an instant, but she could not see the *Nautilus*, being too low in the water. I fancied this steamboat belonged to the P.O. Company, which runs from Ceylon to Sydney, touching at King George's Point and Melbourne.

At five o'clock in the evening, before that fleeting twilight which binds night to day in tropical zones, Conseil and I were astonished by a curious spectacle.

It was a shoal of argonauts travelling along on the surface of the ocean. We could count several hundreds. They belonged to the tubercle kind which are peculiar to the Indian seas.

These graceful molluscs moved backwards by means of their locomotive tube, through which they propelled the water already drawn in. Of their eight tentacles, six were elongated, and stretched out floating on the water, whilst the other two, rolled up flat, were spread to the wing like a light sail. I saw their spiral-shaped and fluted shells, which Cuvier justly compares to an elegant skiff. A boat indeed ! It bears the creature which secretes it without its adhering to it.

For nearly an hour the *Nautilus* floated in the midst of this shoal of molluscs. Then I know not what sudden fright they took. But as if at a signal every sail was furled, the

arms folded, the body drawn in, the shells turned over, changing their centre of gravity, and the whole fleet disappeared under the waves. Never did the ships of a squadron manœuvre with more unity.

At that moment night fell suddenly, and the reeds, scarcely raised by the breeze, lay peaceably under the sides of the *Nautilus*.

The next day, 26th of January, we cut the equator at the eighty-second meridian and entered the northern hemisphere. During the day a formidable troop of sharks accompanied us, terrible creatures, which multiply in these seas and make them very dangerous. They were "cestracio philippi" sharks, with brown backs and whitish bellies, armed with eleven rows of teeth—eyed sharks—their throat being marked with a large black spot surrounded with white like an eye. There were also some Isabella sharks, with rounded snouts marked with dark spots. These powerful creatures often hurled themselves at the windows of the saloon with such violence as to make us feel very insecure. At such times Ned Land was no longer master of himself. He wanted to go to the surface and harpoon the monsters, particularly certain smooth-hound sharks, whose mouth is studded with teeth like a mosaic ; and large tiger-sharks nearly six yards long, the last named of which seemed to excite him more particularly. But the *Nautilus*, accelerating her speed, easily left the most rapid of them behind.

The 27th of January, at the entrance of the vast Bay of Bengal, we met repeatedly a forbidding spectacle, dead bodies floating on the surface of the water. They were the dead of the Indian villages, carried by the Ganges to the level of the sea, and which the vultures, the only undertakers of the country, had not been able to devour. But the sharks did not fail to help them at their funeral work.

About seven o'clock in the evening, the *Nautilus*, half-immersed, was sailing in a sea of milk. At first sight the ocean seemed lactified. Was it the effect of the lunar rays ? No ; for the moon, scarcely two days old, was still lying

hidden under the horizon in the rays of the sun. The whole sky, though lit by the sidereal rays, seemed black by contrast with the whiteness of the waters.

Conseil could not believe his eyes, and questioned me as to the cause of this strange phenomenon. Happily I was able to answer him.

"It is called a milk sea," I explained. "A large extent of white wavelets often to be seen on the coasts of Amboyna, and in these parts of the sea."

"But, sir," said Conseil, "can you tell me what causes such an effect? for I suppose the water is not really turned into milk."

"No, my boy; and the whiteness which surprises you is caused only by the presence of myriads of infusoria, a sort of luminous little worm, gelatinous and without colour, of the thickness of a hair, and whose length is not more than seven-thousandths of an inch. These insects adhere to one another sometimes for several leagues."

"Several leagues!" exclaimed Conseil.

"Yes, my boy; and you need not try to compute the number of these infusoria. You will not be able, for, if I am not mistaken, ships have floated on these milk seas for more than forty miles."

Towards midnight the sea suddenly resumed its usual colour; but behind us, even to the limits of the horizon, the sky reflected the whitened waves, and for a long time seemed impregnated with the vague glimmerings of an aurora borealis.

CHAPTER II

A NOVEL PROPOSAL OF CAPTAIN NEMO'S

On the 28th of February, when at noon the *Nautilus* came to the surface of the sea, in $9^{\circ} 4' N.$ lat., there was land in sight about eight miles to westward. The first thing

I noticed was a range of mountains about two thousand feet high, the shapes of which were most capricious. On taking the bearings, I knew that we were nearing the island of Ceylon, the pearl which hangs from the lobe of the Indian Peninsula.

Captain Nemo and his second appeared at this moment. The Captain glanced at the map. Then turning to me, said :

"The Island of Ceylon, noted for its pearl-fisheries. Would you like to visit one of them, M. Aronnax ?"

"Certainly, Captain."

"Well, the thing is easy. Though, if we see the fisheries, we shall not see the fishermen. The annual exportation has not yet begun. Never mind, I will give orders to make for the Gulf of Manaar, where we shall arrive in the night."

The Captain said something to his second, who immediately went out. Soon the *Nautilus* returned to her native element, and the manometer showed that she was about thirty feet deep.

"Well, sir," said Captain Nemo, "you and your companions shall visit the Bank of Manaar, and if by chance some fisherman should be there, we shall see him at work."

"Agreed, Captain !"

"By the by, M. Aronnax you are not afraid of sharks ?"

"Sharks !" exclaimed I.

This question seemed a very hard one.

"Well ?" continued Captain Nemo.

"I admit, Captain, that I am not yet very familiar with that kind of fish."

"We are accustomed to them," replied Captain Nemo, "and in time you will be too. However, we shall be armed, and on the road we may be able to hunt some of the tribe. It is interesting. So, till to-morrow, sir, and early."

This said in a careless tone, Captain Nemo left the saloon. Now, if you were invited to hunt the bear in the mountains of Switzerland, what would you say ?

"Very well ! to-morrow we will go and hunt the

bear." If you were asked to hunt the lion in the plains of Atlas, or the tiger in the Indian jungles, what would you say ?

" Ha ! ha ! it seems we are going to hunt the tiger or the lion ! " But when you are invited to hunt the shark in its natural element, you would perhaps reflect before accepting the invitation. As for myself, I passed my hand over my forehead, on which stood large drops of cold perspiration. " Let us reflect," said I, " and take our time. Hunting otters in submarine forests, as we did in the Island of Crespo, will pass ; but going up and down at the bottom of the sea, where one is almost certain to meet sharks, is quite another thing ! I know well that in certain countries, particularly in the Andaman Islands, the negroes never hesitate to attack them with a dagger in one hand and a running noose in the other ; but I also know that few who affront those creatures ever return alive. However, I am not a negro, and if I were I think a little hesitation in this case would not be ill-timed."

At this moment Conseil and the Canadian entered, quite composed, and even joyous. They knew not what awaited them.

" Faith, sir," said Ned Land, " your Captain Nemo—the devil take him !—has just made us a very pleasant offer."

" Ah ! " said I, " you know ? "

" If agreeable to you, sir," interrupted Conseil, " the commander of the *Nautilus* has invited us to visit the magnificent Ceylon fisheries to-morrow, in your company ; he did it kindly, and behaved like a real gentleman."

" He said nothing more ? "

" Nothing more, sir, except that he had already spoken to you of this little walk."

" Sir," said Conseil, " would you give us some details of the pearl fishery ? "

" As to the fishing itself," I asked, " or the incidents, which ? "

"On the fishing," replied the Canadian ; "before entering upon the ground, it is as well to know something about it."

"Very well ; sit down, my friends, and I will teach you."

Ned and Conseil seated themselves on an ottoman, and the first thing the Canadian asked was :

"Sir, what is a pearl ?"

"My worthy Ned," I answered, "to the poet, a pearl is a tear of the sea ; to the Orientals, it is a drop of dew solidified ; to the ladies, it is a jewel of an oblong shape, of a brilliancy of mother-of-pearl substance, which they wear on their fingers, their necks, or their ears ; for the chemist it is a mixture of phosphate and carbonate of lime, with a little gelatine ; and lastly, for naturalists, it is simply a morbid secretion of the organ that produces the mother-of-pearl amongst certain bivalves."

"Branch of mollusca," said Conseil.

"Precisely so, my learned Conseil ; and, amongst these testacea the earshell, the tridacnæ, the turbot, in a word, all those which secrete mother-of-pearl, that is, the blue, bluish, violet, or white substance which lines the interior of their shells, are capable of producing pearls."

"Mussels too ?" asked the Canadian.

"Yes, mussels of certain waters in Scotland, Wales, Ireland, Saxony, Bohemia, and France."

"Good ! For the future I shall pay attention," replied the Canadian.

"But," I continued, "the particular mollusc which secretes the pearl is the *pearl-oyster*. The pearl is nothing but a formation deposited in a globular form, either adhering to the oyster-shell or buried in the folds of the creature. On the shell it is fast : in the flesh it is loose ; but always has for a kernel a small hard substance, maybe a barren egg, maybe a grain of sand, around which the pearly matter deposits itself year after year successively, and by thin concentric layers."

"Are many pearls found in the same oyster ?" asked Conseil.

"Yes, my boy. Some are a perfect casket. One oyster has been mentioned, though I allow myself to doubt it, as having contained no less than a hundred and fifty sharks."

"A hundred and fifty sharks!" exclaimed Ned Land.

"Did I say sharks?" said I hurriedly. "I meant to say a hundred and fifty pearls. Sharks would not be sense."

"Certainly not," said Conseil; "but will you tell us now by what means they extract these pearls?"

"They proceed in various ways. When they adhere to the shell, the fishermen often pull them off with pincers; but the most common way is to lay the oysters on mats of the seaweed which covers the banks. Thus they die in the open air; and at the end of ten days they are in a forward state of decomposition. They are then plunged into large reservoirs of sea-water; then they are opened and washed."

"The price of these pearls varies according to their size?" asked Conseil.

"Not only according to their size," I answered, "but also according to their shape, their *water* (that is, their colour), and their lustre: that is, that bright and diapered sparkle which makes them so charming to the eye. The most beautiful are called virgin pearls, or paragons. They are formed alone in the tissue of the mollusc, are white, often opaque, and sometimes have the transparency of an opal; they are generally round or oval. The round are made into bracelets, the oval into pendants, and, being more precious, are sold singly. Those adhering to the shell of the oyster are more irregular in shape, and are sold by weight. Lastly, in a lower order are classed those small pearls known under the name of seed-pearls; they are sold by measure, and are especially used in embroidery for church ornaments."

"But," said Conseil, "is this pearl-fishery dangerous?"

"No," I answered, quickly; "particularly if certain precautions are taken."

"What does one risk in such a calling?" said Ned Land, "the swallowing of some mouthfuls of sea-water?"

"As you say, Ned. By the by," said I, trying to take
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Captain Nemo's careless tone, "are you afraid of sharks, brave Ned?"

"I!" replied the Canadian; "a harpooner by profession? It is my trade to make light of them."

"But," said I, "it is not a question of fishing for them with an iron-swivel, hoisting them into the vessel, cutting off their tails with a blow of a chopper, ripping them up, and throwing their heart into the sea!"

"Then, it is a question of——"

"Precisely."

"In the water?"

"In the water."

"Faith, with a good harpoon! You know, sir, these sharks are ill-fashioned beasts. They must turn on their bellies to seize you, and in that time——"

Ned Land had a way of saying "seize" which made my blood run cold.

"Well, and you, Conseil, what do you think of sharks?"

"Me!" said Conseil. "I will be frank, sir."

"So much the better," thought I.

"If you, sir, mean to face the sharks, I do not see why your faithful servant should not face them with you."

CHAPTER III

A PEARL OF TEN MILLIONS

The next morning at four o'clock I was awakened by the steward whom Captain Nemo had placed at my service. I rose hurriedly, dressed, and went into the saloon.

Captain Nemo was awaiting me.

"M. Aronnax," said he, "are you ready to start?"

"I am ready."

"Then please to follow me."

"And my companions, Captain?"

"They have been told and are waiting."

“ Are we not to put on our diver’s dresses ? ” asked I.

“ Not yet. I have not allowed the *Nautilus* to come too near this coast, and we are some distance from the Manaar Bank ; but the boat is ready, and will take us to the exact point of disembarking, which will save us a long way. It carries our diving apparatus, which we will put on when we begin our submarine journey.”

Captain Nemo conducted me to the central staircase, which led on the platform. Ned and Conseil were already there, delighted at the idea of the “ pleasure party ” which was preparing. Five sailors from the *Nautilus*, with their oars, waited in the boat, which had been made fast against the side.

The night was still dark. Layers of clouds covered the sky, allowing but few stars to be seen. I looked on the side where the land lay, and saw nothing but a dark line enclosing three parts of the horizon, from south-west to north-west. The *Nautilus*, having returned during the night up the western coast of Ceylon, was now west of the bay, or rather gulf, formed by the mainland and the Island of Manaar. There, under the dark waters, stretched the pintadine bank, an inexhaustible field of pearls, the length of which is more than twenty miles.

Captain Nemo, Ned Land, Conseil, and I took our places in the stern of the boat. The master went to the tiller ; his four companions leaned on their oars, the painter was cast off, and we sheered off.

The boat went towards the south ; the oarsmen did not hurry. I noticed that their strokes, strong in the water, only followed each other every ten seconds, according to the method generally adopted in the navy. Whilst the craft was running by its own velocity, the liquid drops struck the dark depths of the waves crisply like spats of melted lead. A little billow, spreading wide, gave a slight roll to the boat, and some samphire reeds flapped before it.

We were silent. What was Captain Nemo thinking of ? Perhaps of the land he was approaching, and which he

found too near to him, contrary to the Canadian's opinion, who thought it too far off. As to Conseil, he was merely there from curiosity.

About half-past five the first tints on the horizon showed the upper line of coast more distinctly. Flat enough in the east, it rose a little to the south. Five miles still lay between us, and it was indistinct owing to the mist on the water. At six o'clock it became suddenly daylight, with that rapidity peculiar to tropical regions, which know neither dawn nor twilight. The solar rays pierced the curtain of clouds, piled up on the eastern horizon, and the radiant orb rose rapidly. I saw land distinctly, with a few trees scattered here and there. The boat neared Manaar Island, which was rounded to the south. Captain Nemo rose from his seat and watched the sea.

At a sign from him the anchor was dropped, but the chain scarcely ran, for it was little more than a yard deep, and this spot was one of the highest points of the bank of pintadines.

"Here we are, M. Aronnax," said Captain Nemo. "You see that enclosed bay? Here, in a month will be assembled the numerous fishing boats of the exporters, and these are the waters their divers will ransack so boldly. Happily, this bay is well situated for that kind of fishing. It is sheltered from the strongest winds; the sea is never very rough here, which makes it favourable for the diver's work. We will now put on our dresses, and begin our walk."

I did not answer, and, while watching the suspected waves, began with the help of the sailors to put on my heavy sea-dress. Captain Nemo and my companions were also dressing. None of the *Nautilus* men were to accompany us on this new excursion.

Soon we were enveloped to the throat in india-rubber clothing; the air apparatus fixed to our backs by braces. As to the Ruhmkorff apparatus, there was no necessity for it. Before putting my head into the copper cap, I had asked the question of the Captain.

"They would be useless," he replied. "We are going to no great depth, and the solar rays will be enough to light our walk. Besides, it would not be prudent to carry the electric light in these waters ; its brilliancy might attract some of the dangerous inhabitants of the coast most inopportunately."

As Captain Nemo pronounced these words, I turned to Conseil and Ned Land. But my two friends had already encased their heads in the metal cap, and they could neither hear nor answer.

One last question remained to ask of Captain Nemo.

"And our arms ? " asked I ; "our guns ? "

"Guns ! What for ? Do not mountaineers attack the bear with a dagger in their hand, and is not steel surer than lead ? Here is a strong blade ; put it in your belt, and we start."

I looked at my companions ; they were armed like us, and, more than that, Ned Land was brandishing an enormous harpoon, which he had placed in the boat before leaving the *Nautilus*.

Then, following the Captain's example, I allowed myself to be dressed in the heavy copper helmet, and our reservoirs of air were at once in activity. An instant after we were landed, one after the other, in about two yards of water upon an even sand. Captain Nemo made a sign with his hand, and we followed him by a gentle declivity till we disappeared under the waves.

At about seven o'clock we found ourselves at last surveying the oyster-banks on which the pearl-oysters are reproduced by millions.

Captain Nemo pointed with his hand to the enormous heap of oysters ; and I could well understand that this mine was inexhaustible, for Nature's creative power is far beyond man's instinct of destruction. Ned Land, faithful to his instinct, hastened to fill a net which he carried by his side with some of the finest specimens. But we could not stop. We must follow the Captain, who seemed

to guide himself by paths known only to himself. The ground was sensibly rising, and sometimes, on holding up my arm, it was above the surface of the sea. Then the level of the bank would sink capriciously. Often we rounded high rocks scarped into pyramids. In their dark fractures huge crustacea, perched upon their high claws like some war-machine, watched us with fixed eyes, and under our feet crawled various kinds of annelides.

At this moment there opened before us a large grotto dug in a picturesque heap of rocks and carpeted with all the thick warp of the submarine flora. At first it seemed very dark to me. The solar rays seemed to be extinguished by successive gradations, until its vague transparency became nothing more than drowned light. Captain Nemo entered ; we followed. My eyes soon accustomed themselves to this relative state of darkness. I could distinguish the arches springing capriciously from natural pillars, standing broad upon their granite base, like the heavy columns of Tuscan architecture. Why had our incomprehensible guide led us to the bottom of this submarine crypt ? I was soon to know. After descending a rather sharp declivity, our feet trod the bottom of a kind of circular pit. There Captain Nemo stopped, and with his hand indicated an object I had not yet perceived. It was an oyster of extraordinary dimensions, a gigantic tridacne, a goblet which could have contained a whole lake of holy-water, a basin the breadth of which was more than two yards and a half, and consequently larger than that ornamenting the saloon of the *Nautilus*. I approached this extraordinary mollusc. It adhered by its filaments to a table of granite, and there, isolated, it developed itself in the calm waters of the grotto. I estimated the weight of this tridacne at 600 lb. Such an oyster would contain 30 lb. of meat ; and one must have the stomach of a Gargantua to demolish some dozens of them.

Captain Nemo was evidently acquainted with the existence of this bivalve, and seemed to have a particular motive in verifying the actual state of this tridacne. The

shells were a little open ; the Captain came near and put his dagger between to prevent them from closing ; then with his hand he raised the membrane with its fringed edges, which formed a cloak for the creature. There, between the folded plaits, I saw a loose pearl, whose size equalled that of a coco-nut. Its globular shape, perfect clearness, and admirable lustre made it altogether a jewel of inestimable value. Carried away by my curiosity, I stretched out my hand to seize it, weigh it, and touch it ; but the Captain stopped me, made a sign of refusal, and quickly withdrew his dagger, and the two shells closed suddenly. I then understood Captain Nemo's intention. In leaving this pearl hidden in the mantle of the tridacne he was allowing it to grow slowly. Each year the secretions of the mollusc would add new concentric circles. I estimated its value at £500,000 at least.

After ten minutes Captain Nemo stopped suddenly. I thought he had halted previously to returning. No ; by a gesture he bade us crouch beside him in a deep fracture of the rock, his hand pointed to one part of the liquid mass, which I watched attentively.

About five yards from me a shadow appeared, and sank to the ground. The disquieting idea of sharks shot through my mind, but I was mistaken ; and once again it was not a monster of the ocean that we had anything to do with.

It was a man, a living man, an Indian, a fisherman, a poor devil who, I suppose, had come to glean before the harvest. I could see the bottom of his canoe anchored some feet above his head. He dived and went up successively. A stone held between his feet, cut in the shape of a sugar loaf, whilst a rope fastened him to his boat, helped him to descend more rapidly. This was all his apparatus. Reaching the bottom, about five yards deep, he went on his knees and filled his bag with oysters picked up at random. Then he went up, emptied it, pulled up his stone, and began the operation once more, which lasted thirty seconds.

The diver did not see us. The shadow of the rock hid us

from sight. And how should this poor Indian ever dream that men, beings like himself, should be there under the water watching his movements and losing no detail of the fishing? Several times he went up in this way, and dived again. He did not carry away more than ten at each plunge, for he was obliged to pull them from the bank to which they adhered by means of their strong byssus. And how many of those oysters for which he risked his life had no pearl in them! I watched him closely; his manœuvres were regular; and for the space of half an hour no danger appeared to threaten him.

I was beginning to accustom myself to the sight of this interesting fishing, when suddenly, as the Indian was on the ground, I saw him make a gesture of terror, rise, and make a spring to return to the surface of the sea.

I understood his dread. A gigantic shadow appeared just above the unfortunate diver. It was a shark of enormous size advancing diagonally, his eyes on fire, and his jaws open. I was mute with horror and unable to move.

The voracious creature shot towards the Indian, who threw himself on one side to avoid the shark's fins; but not its tail, for it struck his chest and stretched him on the ground.

This scene lasted but a few seconds: the shark returned, and, turning on his back, prepared himself for cutting the Indian in two, when I saw Captain Nemo rise suddenly, and then, dagger in hand, walk straight to the monster, ready to fight face to face with him. The very moment the shark was going to snap the unhappy fisherman in two, he perceived his new adversary, and, turning over, made straight towards him.

I can still see Captain Nemo's position. Holding himself well together, he waited for the shark with admirable coolness; and, when it rushed at him, threw himself on one side with wonderful quickness, avoiding the shock, and burying his dagger deep into its side. But it was not all over. A terrible combat ensued.

The shark had seemed to roar, if I might say so. The blood rushed in torrents from its wound. The sea was dyed red, and through the opaque liquid I could distinguish nothing more. Nothing more until the moment when, like lightning, I saw the undaunted Captain hanging on to one of the creature's fins, struggling, as it were, hand to hand with the monster, and dealing successive blows at his enemy, yet still unable to give a decisive one.

The shark's struggles agitated the water with such fury that the rocking threatened to upset me.

I wanted to go to the Captain's assistance, but, nailed to the spot with horror, I could not stir.

I saw the haggard eye ; I saw the different phases of the fight. The Captain fell to the earth, upset by the enormous mass which leant upon him. The shark's jaws opened wide, like a pair of factory shears, and it would have been all over with the Captain ; but, quick as thought, harpoon in hand, Ned Land rushed towards the shark and struck it with its sharp point.

The waves were impregnated with a mass of blood. They rocked under the shark's movements, which beat them with indescribable fury. Ned Land had not missed his aim. It was the monster's death-rattle. Struck to the heart, it struggled in dreadful convulsions, the shock of which overthrew Conseil.

But Ned Land had disentangled the Captain, who, getting up without any wound, went straight to the Indian, quickly cut the cord which held him to his stone, took him in his arms, and, with a sharp blow of his heel, mounted to the surface.

We all three followed in a few seconds, saved by a miracle, and reached the fisherman's boat.

Captain Nemo's first care was to recall the unfortunate man to life again. I did not think he could succeed. I hoped so, for the poor creature's immersion was not long ; but the blow from the shark's tail might have been his death-blow.

Happily, with the Captain's and Conseil's sharp friction,

I saw consciousness return by degrees. He opened his eyes. What was his surprise, his terror even, at seeing four great copper heads leaning over him ! And, above all, what must he have thought when Captain Nemo, drawing from the pocket of his dress a bag of pearls, placed it in his hand ! This munificent charity from the man of the waters to the poor Cingalese was accepted with a trembling hand. His wondering eyes showed that he knew not to what super-human beings he owed both fortune and life.

At a sign from the Captain we regained the bank, and, following the road already traversed, came in about half an hour to the anchor which held the canoe of the *Nautilus* to the earth.

Once on board, we each, with the help of the sailors, got rid of the heavy copper helmet.

Captain Nemo's first word was to the Canadian.

"Thank you, Master Land," said he.

"It was in revenge, Captain," replied Ned Land. "I owed you that."

A ghastly smile passed across the Captain's lips, and that was all.

"To the *Nautilus*," said he.

The boat flew over the waves. Some minutes after we met the shark's dead body floating. By the black marking of the extremity of its fins, I recognised the terrible melanopteron of the Indian Seas, of the species of shark so properly called. It was more than twenty-five feet long ; its enormous mouth occupied one-third of its body. It was an adult, as was known by its six rows of teeth placed in an isosceles triangle in the upper jaw.

Whilst I was contemplating this inert mass, a dozen of these voracious beasts appeared round the boat ; and, without noticing us, threw themselves upon the dead body and fought with one another for the pieces.

At half-past eight we were again on board the *Nautilus*. There I reflected on the incidents which had taken place in our excursion to the Manaar Bank.

Two conclusions I must inevitably draw from it—one bearing upon the unparalleled courage of Captain Nemo, the other upon his devotion to a human being, a representative of that race from which he fled beneath the sea. Whatever he might say, this strange man had not yet succeeded in entirely crushing his heart.

When I made this observation to him, he answered in a slightly moved tone :

“That Indian, sir, is an inhabitant of an oppressed country ; and I am still, and shall be, to my last breath, one of them !”

CHAPTER IV

THE RED SEA

IN the course of the day of the 29th of January, the island of Ceylon disappeared under the horizon, and the *Nautilus*, at a speed of twenty miles an hour, slid into the labyrinth of canals which separate the Maldives from the Laccadives. It coasted even the Island of Kiltan, a land originally coralline, discovered by Vasco da Gama in 1499, and one of the nineteen principal islands of the Laccadive Archipelago, situated between 10° and $14^{\circ} 30'$ N. lat., and $69^{\circ} 50' 72''$ E. long.

We had made 16,220 miles, or 7,500 (French) leagues from our starting-point in the Japanese Seas.

The next day (30th January), when the *Nautilus* went to the surface of the ocean there was no land in sight. Its course was N.N.E., in the direction of the Sea of Oman, between Arabia and the Indian Peninsula, which serves as an outlet to the Persian Gulf. It was evidently a block without any possible egress. Where was Captain Nemo taking us to ? I could not say. This, however, did not satisfy the Canadian, who that day came to me asking where we were going.

“We are going where our Captain’s fancy takes us, Master Ned.”

"His fancy cannot take us far, then," said the Canadian. "The Persian Gulf has no outlet : and, if we do go in, it will not be long before we are out again."

"Very well, then, we will come out again, Master Land ; and if, after the Persian Gulf, the *Nautilus* would like to visit the Red Sea, the Straits of Bab-el-mandeb are there to give us entrance."

"I need not tell you, sir," said Ned Land, "that the Red Sea is as much closed as the Gulf, as the Isthmus of Suez is not yet cut ; and, if it was, a boat as mysterious as ours would not risk itself in a canal cut with sluices. And again, the Red Sea is not the road to take us back to Europe."

"But I never said we were going back to Europe."

"What do you suppose, then ?"

"I suppose that, after visiting the curious coasts of Arabia and Egypt, the *Nautilus* will go down the Indian Ocean again, perhaps cross the Channel of Mozambique, perhaps off the Mascarenhas, so as to gain the Cape of Good Hope."

"And once at the Cape of Good Hope ?" asked the Canadian, with peculiar emphasis.

"Well, we shall penetrate into that Atlantic which we do not yet know. Ah ! friend Ned, you are getting tired of this journey under the sea ; you are surfeited with the incessantly varying spectacle of submarine wonders. For my part, I shall be sorry to see the end of a voyage which it is given to so few men to make."

For four days, till the 3rd of February, the *Nautilus* scoured the Sea of Oman, at various speeds and at various depths. It seemed to go at random, as if hesitating as to which road it should follow, but we never passed the Tropic of Cancer.

In quitting this sea we sighted Muscat for an instant, one of the most important towns of the country of Oman. I admired its strange aspect, surrounded by black rocks upon which its white houses and forts stood in relief. I saw

the rounded domes of its mosques, the elegant points of its minarets, its fresh and verdant terraces. But it was only a vision ! The *Nautilus* soon sank under the waves of that part of the sea.

We passed along the Arabian coast of Mahrah and Hadramaut, for a distance of six miles, its undulating line of mountains being occasionally relieved by some ancient ruin. The 5th of February we at last entered the Gulf of Aden, a perfect funnel introduced into the neck of Bab-el-mandeb, through which the Indian waters entered the Red Sea.

The 6th of February, the *Nautilus* floated in sight of Aden, perched upon a promontory which a narrow isthmus joins to the mainland, a kind of inaccessible Gibraltar, the fortifications of which were rebuilt by the English after taking possession in 1839. I caught a glimpse of the octagon minarets of this town, which was at one time the richest commercial magazine on the coast.

I certainly thought that Captain Nemo, arrived at this point, would back out again ; but I was mistaken, for he did no such thing, much to my surprise.

The next day, the 7th of February, we entered the Straits of Bab-el-mandeb, the name of which, in the Arab tongue, means The Gate of Tears.

To twenty miles in breadth, it is only thirty-two in length. And for the *Nautilus*, starting at full speed, the crossing was scarcely the work of an hour. But I saw nothing, not even the Island of Perim, with which the British Government has fortified the position of Aden. There were too many English or French steamers of the line of Suez to Bombay, Calcutta to Melbourne, and from Bourbon to the Mauritius, furrowing this narrow passage, for the *Nautilus* to venture to show itself. So it remained prudently below. At last, about noon, we were in the waters of the Red Sea.

I would not even seek to understand the caprice which had decided Captain Nemo upon entering the gulf. But

I quite approved of the *Nautilus* entering it. Its speed was lessened : sometimes it kept on the surface, sometimes it dived to avoid a vessel, and thus I was able to observe the upper and lower parts of this curious sea.

The 8th of February, from the first dawn of day, Mocha came in sight, now a ruined town, whose walls would fall at a gunshot, yet which shelters here and there some verdant date-trees ; once an important city, containing six public markets, and twenty-six mosques, and whose walls, defended by fourteen forts, formed a girdle of two miles in circumference.

The *Nautilus* then approached the African shore, where the depth of the sea was greater. There, between two waters clear as crystal, through the open panels we were allowed to contemplate the beautiful bushes of brilliant coral and large blocks of rock clothed with a splendid fur of green algæ and fuci. What an indescribable spectacle, and what variety of sites and landscapes along these sand-banks and volcanic islands which bound the Libyan coast ! But where these shrubs appeared in all their beauty was on the eastern coast, which the *Nautilus* soon gained. It was on the coast of Tehama, for there not only did this display of zoophytes flourish beneath the level of the sea, but they also formed picturesque interlacings which unfolded themselves about sixty feet above the surface, more capricious but less highly coloured than those whose freshness was kept up by the vital power of the waters.

What charming hours I passed thus at the window of the saloon ! What new specimens of submarine flora and fauna did I admire under the brightness of our electric lantern !

The 9th of February the *Nautilus* floated in the broadest part of the Red Sea, which is comprised between Souakin, on the west coast, and Koomfidah, on the east coast, with a diameter of ninety miles.

That day at noon, after the bearings were taken, Captain Nemo mounted the platform, where I happened to be, and I was determined not to let him go down again without at

least pressing him regarding his ulterior projects. As soon as he saw me he approached and graciously offered me a cigar.

"Well, sir, does this Red Sea please you? Have you sufficiently observed the wonders it covers, its fishes, its zoophytes, its parterres of sponges, and its forests of coral? Did you catch a glimpse of the towns on its borders?"

"Yes, Captain Nemo," I replied; "and the *Nautilus* is wonderfully fitted for such a study. Ah! it is an intelligent boat!"

"Yes, sir, intelligent and invulnerable. It fears neither the terrible tempests of the Red Sea, nor its currents, nor its sandbanks."

"Certainly," said I, "this sea is quoted as one of the worst, and in the time of the ancients, if I am not mistaken, its reputation was detestable."

"Detestable, M. Aronnax. The Greek and Latin historians do not speak favourably of it, and Strabo says it is very dangerous during the Etesian winds and in the rainy season. The Arabian Edrisi portrays it under the name of the Gulf of Colzoum, and relates that vessels perished there in great numbers on the sandbanks and that no one would risk sailing in the night. It is, he pretends, a sea subject to fearful hurricanes, strewn with inhospitable islands, and 'which offers nothing good either on its surface or in its depths.'"

"One may see," I replied, "that these historians never sailed on board the *Nautilus*."

"Just so," replied the Captain, smiling; "and in that respect moderns are not more advanced than the ancients. It required many ages to find out the mechanical power of steam. Who knows if, in another hundred years, we may not see a second *Nautilus*? Progress is slow, M. Aronnax."

"It is true," I answered; "your boat is at least a century before its time, perhaps an era. What a misfortune that the secret of such an invention should die with its inventor!"

Captain Nemo did not reply. After some minutes' silence he continued :

" You were speaking of the opinions of ancient historians upon the dangerous navigation of the Red Sea."

" It is true," said I ; " but were not their fears exaggerated ? "

" Yes and no, M. Aronnax," replied Captain Nemo, who seemed to know the Red Sea by heart. " That which is no longer dangerous for a modern vessel, well rigged, strongly built, and master of its own course, thanks to obedient steam, offered all sorts of perils to the ships of the ancients. Picture to yourself those first navigators venturing in ships made of planks sewn with the cords of the palm-tree, saturated with the grease of the seadog, and covered with powdered resin ! They had not even instruments wherewith to take their bearings, and they went by guess amongst currents of which they scarcely knew anything. Under such conditions shipwrecks were, and must have been, numerous. But in our time, steamers running between Suez and the South Seas have nothing more to fear from the fury of this gulf, in spite of contrary trade-winds. The captain and passengers do not prepare for their departure by offering propitiatory sacrifices ; and, on their return, they no longer go ornamented with wreaths and gilt fillets to thank the gods in the neighbouring temple."

" I agree with you," said I ; " and steam seems to have killed all gratitude in the hearts of sailors. But, Captain, since you seem to have especially studied this sea, can you tell me the origin of its name ? "

" There exist several explanations on the subject, M. Aronnax. Would you like to know the opinion of a chronicler of the fourteenth century ? "

" Willingly."

" This fanciful writer pretends that its name was given to it after the passage of the Israelites, when Pharaoh perished in the waves which closed at the voice of Moses."

"A poet's explanation, Captain Nemo," I replied ; "but I cannot content myself with that. I ask you for your personal opinion."

"Here it is, M. Aronnax. According to my idea, we must see in this appellation of the Red Sea a translation of the Hebrew word 'Edom' ; and if the ancients gave it that name, it was on account of the particular colour of its waters."

"But up to this time I have seen nothing but transparent waves and without any particular colour."

"Very likely ; but as we advance to the bottom of the gulf, you will see this singular appearance. I remember seeing the Bay of Tor entirely red, like a sea of blood."

"And you attribute this colour to the presence of a microscopic seaweed ?"

"Yes."

"So, Captain Nemo, it is not the first time you have overrun the Red Sea on board the *Nautilus* ?"

"No, sir."

"As you spoke a while ago of the passage of the Israelites and of the catastrophe to the Egyptians, I will ask whether you have met with the traces under the water of this great historical fact ?"

"No, sir ; and for a good reason."

"What is it ?"

"It is that the spot where Moses and his people passed is now so blocked up with sand that the camels can barely bathe their legs there. You can well understand that there would not be water enough for my *Nautilus*."

"And the spot ?" I asked.

"The spot is situated a little above the Isthmus of Suez, in the arm which formerly made a deep estuary, when the Red Sea extended to the Salt Lakes. Now, whether this passage were miraculous or not, the Israelites, nevertheless, crossed there to reach the Promised Land, and Pharaoh's army perished precisely on that spot ; and I think that excavations made in the middle of the sand

would bring to light a large number of arms and instruments of Egyptian origin."

"That is evident," I replied; "and for the sake of archæologists let us hope that these excavations will be made sooner or later, when new towns are established on the isthmus, after the construction of the Suez Canal; a canal, however, very useless to a vessel like the *Nautilus*."

"Very likely; but useful to the whole world," said Captain Nemo. "The ancients well understood the utility of a communication between the Red Sea and the Mediterranean for their commercial affairs: but they did not think of digging a canal direct, and took the Nile as an intermediate. Very probably the canal which united the Nile to the Red Sea was begun by Sesostris, if we may believe tradition. One thing is certain, that in the year 615 before Jesus Christ, Necos undertook the works of an alimentary canal to the waters of the Nile across the plain of Egypt, looking towards Arabia. It took four days to go up this canal, and it was so wide that two triremes could go abreast. It was carried on by Darius, the son of Hystaspes, and probably finished by Ptolemy II. Strabo saw it navigated: but its decline from the point of departure, near Bubastes, to the Red Sea was so slight that it was only navigable for a few months in the year. This canal answered all commercial purposes to the age of Antonius, when it was abandoned and blocked up with sand. Restored by order of the Caliph Omar, it was definitely destroyed in 761 or 762 by Caliph Al-Mansor, who wished to prevent the arrival of provisions to Mohammed-ben-Abdallah, who had revolted against him. During the expedition into Egypt, your General Bonaparte discovered traces of the works in the Desert of Suez; and, surprised by the tide, he nearly perished before regaining Hadjaroth, at the very place where Moses had encamped three thousand years before him."

"Well, Captain, what the ancients dared not undertake,

this junction between the two seas, which will shorten the road from Cadiz to India, M. Lesseps has succeeded in doing ; and before long he will have changed Africa into an immense island."

"Yes, M. Aronnax ; you have the right to be proud of your countryman. Such a man brings more honour to a nation than great captains. He began, like so many others, with disgust and rebuffs ; but he has triumphed, for he has the genius of will. And it is sad to think that a work like that, which ought to have been an international work and which would have sufficed to make a reign illustrious, should have succeeded by the energy of one man. All honour to M. Lesseps !"

"Yes ! honour to the great citizen," I replied, surprised by the manner in which Captain Nemo had just spoken.

"Unfortunately," he continued, "I cannot take you through the Suez Canal ; but you will be able to see the long jetty of Port Said after to-morrow, when we shall be in the Mediterranean."

"The Mediterranean !" I exclaimed.

"Yes, sir ; does that astonish you ?"

"What astonishes me is to think that we shall be there the day after to-morrow."

"Indeed ?"

"Yes, Captain, although by this time I ought to have accustomed myself to be surprised at nothing since I have been on board your boat."

"But the cause of this surprise ?"

"Well ! it is the fearful speed you will have to put on the *Nautilus*, if the day after to-morrow she is to be in the Mediterranean, having made the round of Africa, and doubled the Cape of Good Hope !"

"Who told you that she would make the round of Africa and double the Cape of Good Hope, sir ?"

"Well, unless the *Nautilus* sails on dry land, and passes above the isthmus——"

"Or beneath it, M. Aronnax."

"Beneath it?"

"Certainly," replied Captain Nemo quietly. "A long time ago Nature made under this tongue of land what man has this day made on its surface."

"What! such a passage exists?"

"Yes; a subterranean passage, which I have named the Arabian Tunnel. It takes us beneath Suez and opens into the Gulf of Pelusium."

"But this isthmus is composed of nothing but quicksands?"

"To a certain depth. But at fifty-five yards only there is a solid layer of rock."

"Did you discover this passage by chance?" I asked, more and more surprised.

"Chance and reasoning, sir; and by reasoning even more than by chance. Not only does this passage exist, but I have profited by it several times. Without that I should not have ventured this day into the impassable Red Sea. I noticed that in the Red Sea and in the Mediterranean there existed a certain number of fishes of a kind perfectly identical. Certain of the fact, I asked myself was it possible that there was no communication between the two seas? If there was, the subterranean current must necessarily run from the Red Sea to the Mediterranean, from the sole cause of difference of level. I caught a large number of fishes in the neighbourhood of Suez. I passed a copper ring through their tails, and threw them back into the sea. Some months later, on the coast of Syria, I caught some of my fish ornamented with the ring. Thus the communication between the two was proved. I then sought for it with my *Nautilus*; I discovered it, ventured into it, and before long, sir, you too will have passed through my Arabian tunnel!"

CHAPTER V

THE ARABIAN TUNNEL

That same evening, in $21^{\circ} 30'$ N. lat., the *Nautilus* floated on the surface of the sea, approaching the Arabian coast. I saw Djeddah, the most important counting-house of Egypt, Syria, Turkey, and India. I distinguished clearly enough its buildings, the vessels anchored at the quays, and those whose draught of water obliged them to anchor in the roads. The sun, rather low on the horizon, struck full on the houses of the town, bringing out their whiteness. Outside, some wooden cabins, and some made of reeds, showed the quarter inhabited by the Bedouins. Soon Djeddah was shut out from view by the shadows of night, and the *Nautilus* found herself under water slightly phosphorescent.

The next day, the 10th of February, we sighted several ships running to windward. The *Nautilus* returned to its submarine navigation ; but at noon, when her bearings were taken, the sea being deserted, she rose again to her waterline.

Accompanied by Ned and Conseil, I seated myself on the platform. The coast on the eastern side looked like a mass faintly printed upon a damp fog.

We were leaning on the sides of the pinnace, talking of one thing and another, when Ned Land, stretching out his hand towards a spot on the sea, said :

“ Do you see anything there, sir ? ”

“ No, Ned,” I replied ; “ but I have not your eyes, you know.”

“ Look well,” said Ned, “ there, on the starboard beam, about the height of the lantern ! Do you not see a mass which seems to move ? ”

“ Certainly,” said I, after close attention ; “ I see something like a long black body on the top of the water.”

And certainly before long the black object was not more than a mile from us. It looked like a great sandbank deposited in the open sea. It was a gigantic dugong !

Ned Land looked eagerly. His eyes shone with covetousness at the sight of the animal. His hand seemed ready to harpoon it. One would have thought he was awaiting the moment to throw himself into the sea and attack it in its element.

At this instant Captain Nemo appeared on the platform. He saw the dugong, understood the Canadian's attitude, and, addressing him, said :

"If you held a harpoon just now, Master Land, would it not burn your hand ? "

"Just so, sir."

"And you would not be sorry to go back, for one day, to your trade of a fisherman and to add this cetacean to the list of those you have already killed ? "

"I should not, sir."

"Well, you can try."

"Thank you, sir," said Ned Land, his eyes flaming.

"Only," continued the Captain, "I advise you for your own sake not to miss the creature."

"Is the dugong dangerous to attack ? " I asked, in spite of the Canadian's shrug of the shoulders.

"Yes," replied the Captain ; "sometimes the animal turns upon its assailants and overturns their boat. But for Master Land this danger is not to be feared. His eye is prompt, his arm sure."

At this moment seven men of the crew, mute and immovable as ever, mounted the platform. One carried a harpoon and a line similar to those employed in catching whales. The pinnacle was lifted from the bridge, pulled from its socket, and let down into the sea. Six oarsmen took their seats, and the coxswain went to the tiller. Ned, Conseil, and I went to the back of the boat.

"You are not coming, Captain ? " I asked.

"No, sir ; but I wish you good sport."

The boat put off, and, lifted by the six rowers, drew rapidly towards the dugong, which floated about two miles from the *Nautilus*.

Arrived some cables-length from the cetacean, the speed slackened, and the oars dipped noiselessly into the quiet waters. Ned Land, harpoon in hand, stood in the fore part of the boat. The harpoon used for striking the whale is generally attached to a very long cord which runs out rapidly as the wounded creature draws it after him. But here the cord was not more than ten fathoms long, and the extremity was attached to a small barrel which, by floating, was to show the course the dugong took under the water.

I stood and carefully watched the Canadian's adversary. This dugong, which also bears the name of the halicore, closely resembles the manatee ; its oblong body terminated in a lengthened tail, and its lateral fins in perfect fingers. Its difference from the manatee consisted in its upper jaw, which was armed with two long and pointed teeth which formed on each side diverging tusks.

This dugong which Ned Land was preparing to attack was of colossal dimensions ; it was more than seven yards long. It did not move, and seemed to be sleeping on the waves, which circumstance made it easier to capture.

The boat approached within six yards of the animal. The oars rested on the rowlocks. I half rose. Ned Land, his body thrown a little back, brandished the harpoon in his experienced hand.

Suddenly a hissing noise was heard, and the dugong disappeared. The harpoon, although thrown with great force, had apparently only struck the water.

"Curse it !" exclaimed the Canadian furiously ; "I have missed it !"

"No," said I ; "the creature is wounded—look at the blood ; but your weapon has not stuck in his body."

"My harpoon ! my harpoon !" cried Ned Land.

The sailors rowed on, and the coxswain made for the

floating barrel. The harpoon regained, we followed in pursuit of the animal.

The latter came now and then to the surface to breathe. Its wound had not weakened it, for it shot onwards with great rapidity.

The boat, rowed by strong arms, flew on its track. Several times it approached within some few yards, and the Canadian was ready to strike, but the dugong made off with a sudden plunge, and it was impossible to reach it.

Imagine the passion which excited impatient Ned Land ! He hurled at the unfortunate creature the most energetic expletives in the English tongue. For my part, I was only vexed to see the dugong escape all our attacks.

We pursued it without relaxation for an hour, and I began to think it would prove difficult to capture, when the animal, possessed with the perverse idea of vengeance of which he had cause to repent, turned upon the pinnace and assailed us in its turn.

This manœuvre did not escape the Canadian.

"Look out !" he cried.

The coxswain said some words in his outlandish tongue, doubtless warning the men to keep on their guard.

The dugong came within twenty feet of the boat, stopped, sniffed the air briskly with its large nostrils (not pierced at the extremity, but in the upper part of its muzzle). Then, taking a spring, he threw himself upon us.

The pinnace could not avoid the shock, and half upset, shipped at least two tons of water, which had to be emptied ; but, thanks to the coxswain, we caught it sideways, not full front, so we were not quite overturned. While Ned Land, clinging to the bows, belaboured the gigantic animal with blows from his harpoon, the creature's teeth were buried in the gunwale, and it lifted the whole thing out of the water, as a lion does a roebuck. We were upset over one another, and I know not how the adventure would have ended, if the Canadian, still enraged with the beast, had not struck it to the heart.

I heard its teeth grind on the iron plate, and the dugong disappeared, carrying the harpoon with him. But the barrel soon returned to the surface, and shortly after the body of the animal, turned on its back. The boat came up with it, took it in tow, and made straight for the *Nautilus*.

It required tackle of enormous strength to hoist the dugong on to the platform. It weighed 10,000 lb.

The next day, 11th February, the larder of the *Nautilus* was enriched by some more delicate game. A flight of sea-swallows rested on the *Nautilus*. It was a species of the *Sterna nilotica*, peculiar to Egypt ; its beak is black, head grey and pointed, the eye surrounded by white spots, the back, wings, and tail of a greyish colour, the belly and throat white, and claws red. They also took some dozen of Nile ducks, a wild bird of high flavour, its throat and upper part of the head white with black spots.

About five o'clock in the evening we sighted to the north the Cape of Ras-Mohammed. This cape forms the extremity of Arabia Petræa, comprised between the Gulf of Suez and the Gulf of Acabah.

The *Nautilus* penetrated into the Straits of Jubal, which leads to the Gulf of Suez. I distinctly saw a high mountain, towering between the two gulfs of Ras-Mohammed. It was Mount Horeb, that Sinai at the top of which Moses saw God face to face.

At six o'clock the *Nautilus*, sometimes floating, sometimes immersed, passed some distance from Tor, situated at the end of the bay, the waters of which seemed tinted with red, an observation already made by Captain Nemo. Then night fell in the midst of a heavy silence, sometimes broken by the cries of the pelican and other night-birds, and the noise of the waves breaking upon the shore, chafing against the rocks, or the panting of some far-off steamer beating the waters of the Gulf with its noisy paddles.

From eight to nine o'clock the *Nautilus* remained some fathoms under the water. According to my calculation we must have been very near Suez. Through the panel of the

saloon I saw the bottom of the rocks brilliantly lit up by our electric lamp. We seemed to be leaving the Straits behind us more and more.

At a quarter-past nine, the vessel having returned to the surface, I mounted the platform. Most impatient to pass through Captain Nemo's tunnel, I could not stay in one place, so came to breathe the fresh night air.

Soon in the shadow I saw a pale light, half discoloured by the fog, shining about a mile from us.

"A floating lighthouse!" said someone near me.

I turned, and saw the Captain.

"It is the floating light of Suez," he continued. "It will not be long before we gain the entrance of the tunnel."

"The entrance cannot be easy?"

"No, sir; for that reason I am accustomed to go into the steersman's cage and myself direct our course. And now, if you will go down, M. Aronnax, the *Nautilus* is going under the waves, and will not return to the surface until we have passed through the Arabian Tunnel."

Captain Nemo led me towards the central staircase; half-way down he opened a door, traversed the upper deck, and landed in the pilot's cage, which it may be remembered rose at the extremity of the platform. It was a cabin measuring six feet square, very much like that occupied by the pilot on the steamboats of the Mississippi or Hudson. In the midst worked a wheel, placed vertically, and caught to the tiller-rope, which ran to the back of the *Nautilus*. Four light-ports with lenticular glasses, let in a groove in the partition of the cabin, allowed the man at the wheel to see in all directions.

This cabin was dark; but soon my eyes accustomed themselves to the obscurity, and I perceived the pilot, a strong man, with his hands resting on the spokes of the wheel. Outside, the sea appeared vividly lit up by the lantern, which shed its rays from the back of the cabin to the other extremity of the platform.

"Now," said Captain Nemo, "let us try to make our passage."

Electric wires connected the pilot's cage with the machinery room, and from there the Captain could communicate simultaneously to his *Nautilus* the direction and the speed. He pressed a metal knob, and at once the speed of the screw diminished.

I looked in silence at the high straight wall we were running by at this moment, the immovable base of a massive sandy coast. We followed it thus for an hour only some few yards off.

Captain Nemo did not take his eye from the knob, suspended by its two concentric circles in the cabin. At a simple gesture, the pilot modified the course of the *Nautilus* every instant.

I had placed myself at the port-scuttle, and saw some magnificent substructures of coral, zoophytes, seaweed, and fucus, agitating their enormous claws, which stretched out from the fissures of the rock.

At a quarter-past ten, the Captain himself took the helm. A large gallery, black and deep, opened before us. The *Nautilus* went boldly into it. A strange roaring was heard round its sides. It was the waters of the Red Sea, which the incline of the tunnel precipitated violently towards the Mediterranean. The *Nautilus* went with the torrent, rapid as an arrow, in spite of the efforts of the machinery, which, in order to offer more effective resistance, beat the waves with reversed screw.

On the walls of the narrow passage I could see nothing but brilliant rays, straight lines, furrows of fire, traced by the great speed, under the brilliant electric light. My heart beat fast.

At thirty-five minutes past ten, Captain Nemo quitted the helm, and, turning to me, said :

"The Mediterranean !"

In less than twenty minutes, the *Nautilus*, carried along by the torrent, had passed through the Isthmus of Suez.

CHAPTER VI

THE GRECIAN ARCHIPELAGO

The next day, the 12th of February, at the dawn of day, the *Nautilus* rose to the surface. I hastened on to the platform. Three miles to the south the dim outline of Pelusium was to be seen. A torrent had carried us from one sea to another. About seven o'clock Ned and Conseil joined me.

"Well, Sir Naturalist," said the Canadian, in a slightly jovial tone, "and the Mediterranean?"

"We are floating on its surface, friend Ned."

"What!" said Conseil, "this very night."

"Yes, this very night; in a few minutes we have passed this impassable isthmus."

"I do not believe it," replied the Canadian.

"Then you are wrong, Master Land," I continued; "this low coast which rounds off to the south is the Egyptian coast. And you who have such good eyes, Ned, you can see the jetty of Port Said stretching into the sea."

The Canadian looked attentively.

"Certainly you are right, sir, and your Captain is a first-rate man. We are in the Mediterranean. Good! Now, if you please, let us talk of our own little affair, but so that no one hears us."

I saw what the Canadian wanted, and, in any case, I thought it better to let him talk, as he wished it; so we all three went and sat down near the lantern, where we were less exposed to the spray of the blades.

"Now, Ned, we listen; what have you to tell us?"

"What I have to tell you is very simple. We are in Europe; and before Captain Nemo's caprices drag us once more to the bottom of the Polar Seas, or lead us into Oceania, I ask to leave the *Nautilus*."

I wished in no way to shackle the liberty of my companions, but I certainly felt no desire to leave Captain Nemo.

Thanks to him, and thanks to his apparatus, I was each

day nearer the completion of my submarine studies ; and I was rewriting my book of submarine depths in its very element. Should I ever again have such an opportunity of observing the wonders of the ocean ? No, certainly not ! And I could not bring myself to the idea of abandoning the *Nautilus* before the cycle of investigation was accomplished.

“ Friend Ned, answer me frankly, are you tired of being on board ? Are you sorry that destiny has thrown us into Captain Nemo’s hands ? ”

The Canadian remained some moments without answering. Then, crossing his arms, he said :

“ Frankly, I do not regret this journey under the seas. I shall be glad to have made it ; but, now that it is made, let us have done with it. That is my idea.”

“ It will come to an end, Ned.”

“ Where and when ? ”

“ Where I do not know—when I cannot say ; or, rather, I suppose it will end when these seas have nothing more to teach us.”

“ Then what do you hope for ? ” demanded the Canadian.

“ That circumstances may occur as well six months hence as now by which we may and ought to profit.”

“ Oh ! ” said Ned Land, “ and where shall we be in six months, if you please, Sir Naturalist ? ”

“ Perhaps in China ; you know the *Nautilus* is a rapid traveller. It goes through water as swallows through the air, or as an express on the land. It does not fear frequented seas ; who can say that it may not beat the coasts of France, England, or America, on which flight may be attempted as advantageously as here.”

“ M. Aronnax,” replied the Canadian, “ your arguments are rotten at the foundation. You speak in the future, ‘ We shall be there ! we shall be here ! ’ I speak in the present, ‘ We are here, and we must profit by it.’ ”

Ned Land’s logic pressed me hard, and I felt myself beaten on that ground. I knew not what argument would now tell in my favour.

"Sir," continued Ned, "let us suppose an impossibility : if Captain Nemo should this day offer you your liberty, would you accept it ? "

"I do not know," I answered.

"And if," he added, "the offer made you this day was never to be renewed, would you accept it ? "

"Friend Ned, this is my answer. Your reasoning is against me. We must not rely on Captain Nemo's good-will. Common prudence forbids him to set us at liberty. On the other side, prudence bids us profit by the first opportunity to leave the *Nautilus*."

"Well, M. Aronnax, that is wisely said."

"Only one observation—just one. The occasion must be serious, and our first attempt must succeed ; if it fails, we shall never find another, and Captain Nemo will never forgive us."

"All that is true," replied the Canadian. "But your observation applies equally to all attempts at flight, whether in two years' time, or in two days'. But the question is still this : If a favourable opportunity presents itself, it must be seized."

"Agreed ! And now, Ned, will you tell me what you mean by a favourable opportunity ? "

"It will be that which, on a dark night, will bring the *Nautilus* a short distance from some European coast."

"And you will try and save yourself by swimming ? "

"Yes, if we were near enough to the bank, and if the vessel was floating at the time. Not if the bank was far away, and the boat was under the water."

"And in that case ? "

"In that case, I should seek to make myself master of the pinnace. I know how it is worked. We must get inside, and the bolts once drawn, we shall come to the surface of the water, without even the pilot, who is in the bows, perceiving our flight."

"Well, Ned, watch for the opportunity ; but do not forget that a hitch will ruin us."

"I will not forget, sir."

"And now, Ned, would you like to know what I think of your project?"

"Certainly, M. Aronnax."

"Well, I think—I do not say I hope—I think that this favourable opportunity will never present itself."

"Why not?"

"Because Captain Nemo cannot hide from himself that we have not given up all hope of regaining our liberty, and he will be on his guard, above all, in the seas and in the sight of European coasts."

"We shall see," replied Ned Land, shaking his head determinedly.

"And now, Ned Land," I added, "let us stop here. Not another word on the subject. The day that you are ready, come and let us know, and we will follow you. I rely entirely upon you."

Thus ended a conversation which, at no very distant time, led to such grave results. I must say here that facts seemed to confirm my foresight, to the Canadian's great despair. Did Captain Nemo distrust us in these frequented seas? or did he only wish to hide himself from the numerous vessels, of all nations, which ploughed the Mediterranean? I could not tell; but we were oftener between waters and far from the coast. Or, if the *Nautilus* did emerge, nothing was to be seen but the pilot's cage; and sometimes it went to great depths, for, between the Grecian Archipelago and Asia Minor we could not touch the bottom by more than a thousand fathoms.

Thus I only knew we were near the Island of Carpathos, one of the Sporades, by Captain Nemo reciting these lines from Virgil:

"Est in Carpathio Neptuni gurgite vates,
Cæruleus Proteus,"

as he pointed to a spot on the planisphere.

It was indeed the ancient abode of Proteus, the old

shepherd of Neptune's flocks, now the Island of Scarpanto, situated between Rhodes and Crete. I saw nothing but the granite base through the glass panels of the saloon.

The next day, the 14th of February, I resolved to employ some hours in studying the fishes of the Archipelago ; but for some reason or other the panels remained hermetically sealed. Upon taking the course of the *Nautilus*, I found that we were going towards Candia, the ancient Isle of Crete. At the time I embarked on the *Abraham Lincoln*, the whole of this island had risen in insurrection against the despotism of the Turks. But how the insurgents had fared since that time I was absolutely ignorant, and it was not Captain Nemo, deprived of all land communications, who could tell me.

I made no allusion to this event when that night I found myself alone with him in the saloon. Besides, he seemed to be taciturn and preoccupied. Then, contrary to his custom, he ordered both panels to be opened, and, going from one to the other, observed the mass of waters attentively. To what end I could not guess ; so, on my side, I employed my time in studying the fish passing before my eyes.

In the midst of the waters a man appeared, a diver, carrying at his belt a leathern purse. It was not a body abandoned to the waves ; it was a living man, swimming with a strong hand, disappearing occasionally to take breath at the surface.

I turned towards Captain Nemo, and in an agitated voice exclaimed :

" A man shipwrecked ! He must be saved at any price ! "

The Captain did not answer me, but came and leaned against the panel.

The man had approached, and, with his face flattened against the glass, was looking at us.

To my great amazement, Captain Nemo signed to him. The diver answered with his hand, mounted immediately to the surface of the water, and did not appear again.

" Do not be uncomfortable," said Captain Nemo. " It

is Nicholas of Cape Matapan, surnamed Pesca. He is well known in all the Cyclades. A bold diver ! water is his element, and he lives more in it than on land, going continually from one island to another, even as far as Crete."

" You know him, Captain ? "

" Why not, M. Aronnax ? "

Saying which, Captain Nemo went towards a piece of furniture standing near the left panel of the saloon. Near this piece of furniture, I saw a chest bound with iron, on the cover of which was a copper plate, bearing the cypher of the *Nautilus* with its device.

At that moment, the Captain, without noticing my presence, opened the piece of furniture, a sort of strong box, which held a great many ingots.

They were ingots of gold. From whence came this precious metal, which represented an enormous sum ? Where did the Captain gather this gold from ? and what was he going to do with it ?

I did not say one word. I looked. Captain Nemo took the ingots one by one, and arranged them methodically in the chest, which he filled entirely. I estimated the contents at more than 4,000 lb. weight of gold, that is to say, nearly £200,000.

The chest was securely fastened, and the Captain wrote an address on the lid, in characters which must have belonged to Modern Greece.

This done, Captain Nemo pressed a knob, the wire of which communicated with the quarters of the crew. Four men appeared, and, not without some trouble, pushed the chest out of the saloon. Then I heard them hoisting it up the iron staircase by means of pulleys.

At that moment, Captain Nemo turned to me.

" And you were saying, sir ? " said he.

" I was saying nothing, Captain."

" Then, sir, if you will allow me, I will wish you good night."

Whereupon he turned and left the saloon.

I returned to my room much troubled, as one may believe. I vainly tried to sleep—I sought the connecting link between the apparition of the diver and the chest filled with gold. Soon, I felt by certain movements of pitching and tossing that the *Nautilus* was leaving the depths and returning to the surface.

Then I heard steps upon the platform ; and I knew they were unfastening the pinnace and launching it upon the waves. For one instant it struck the side of the *Nautilus*, then all noise ceased.

Two hours after, the same noise, the same going and coming was renewed ; the boat was hoisted on board, replaced in its socket, and the *Nautilus* again plunged under the waves.

So these millions had been transported to their address. To what point of the continent ? Who was Captain Nemo's correspondent ?

The next day I related to Conseil and the Canadian the events of the night, which had excited my curiosity to the highest degree. My companions were not less surprised than myself.

" But where does he take his millions to ? " asked Ned Land.

To that there was no possible answer. I returned to the saloon after having breakfast and set to work. Till five o'clock in the evening I employed myself in arranging my notes. At that moment—(ought I to attribute it to some peculiar idiosyncrasy)—I felt so great a heat that I was obliged to take off my coat. It was strange, for we were under low latitudes ; and even then the *Nautilus*, submerged as it was, ought to experience no change of temperature. I looked at the manometer ; it showed a depth of sixty feet, to which atmospheric heat could never attain.

I continued my work, but the temperature rose to such a pitch as to be intolerable.

" Could there be fire on board ? " I asked myself.

I was leaving the saloon, when Captain Nemo entered ;

he approached the thermometer, consulted it, and, turning to me, said :

“Forty-two degrees.”

“I have noticed it, Captain,” I replied ; “and if it gets much hotter we cannot bear it.”

“Oh, sir, it will not get hotter if we do not wish it.”

“You can reduce it as you please, then ? ”

“No ; but I can go farther from the stove which produces it.”

“It is outward, then ! ”

“Certainly ; we are floating in a current of boiling water.”

“Is it possible ! ” I exclaimed.

“Look.”

The panels opened, and I saw the sea entirely white all round. A sulphurous smoke was curling amid the waves, which boiled like water in a copper. I placed my hand on one of the panes of glass, but the heat was so great that I quickly took it off again.

“Where are we ? ” I asked.

“Near the Island of Santorin, sir,” replied the Captain. “I wished to give you a sight of the curious spectacle of a submarine eruption.”

“I thought,” said I, “that the formation of these new islands was ended.”

“Nothing is ever ended in the volcanic parts of the sea,” replied Captain Nemo ; “and the globe is always being worked by subterranean fires. Already, in the nineteenth year of our era, according to Cassiodorus and Pliny, a new island, Theia (the divine), appeared in the very place where these islets have recently been formed. Then they sank under the waves, to rise again in the year 69, when they again subsided. Since that time to our days the Plutonian work has been suspended. But on the 3rd of February, 1866, a new island, which they named George Island, emerged from the midst of the sulphurous vapour near Nea Kamenni, and settled again the 6th of the same month. Seven days

after, the 13th of February, the Island of Aphroessa appeared, leaving between Nea Kamenni and itself a canal ten yards broad. I was in these seas when the phenomenon occurred, and I was able therefore to observe all the different phases. The Island of Aphroessa, of round form, measured 300 feet in diameter, and 30 feet in height. It was composed of black and vitreous lava, mixed with fragments of felspar. And lastly, on the 10th of March, a smaller island, called Reka, showed itself near Nea Kamenni, and since then these three have joined together, forming but one and the same island.

"And the canal in which we are at this moment?" I asked.

"Here it is," replied Captain Nemo, showing me a map of the Archipelago. "You see, I have marked the new islands."

I returned to the glass. The *Nautilus* was no longer moving, the heat was becoming unbearable. The sea, which till now had been white, was red, owing to the presence of salts of iron. In spite of the ship's being hermetically sealed, an insupportable smell of sulphur filled the saloon, and the brilliancy of the electricity was entirely extinguished by bright scarlet flames. I was in a bath, I was choking, I was broiled.

"We can remain no longer in this boiling water," said I to the Captain.

"It would not be prudent," replied the impassive Captain Nemo.

An order was given; the *Nautilus* tacked about and left the furnace it could not brave with impunity. A quarter of an hour after we were breathing fresh air on the surface. The thought then struck me that, if Ned Land had chosen this part of the sea for our flight, we should never have come alive out of this sea of fire.

The next day, the 16th of February, we left the basin which, between Rhodes and Alexandria, is reckoned about 1,500 fathoms in depth, and the *Nautilus*, passing some

distance from Cerigo, quitted the Grecian Archipelago after having doubled Cape Matapan.

CHAPTER VII

THE MEDITERRANEAN IN FORTY-EIGHT HOURS

The Mediterranean, the blue sea *par excellence*, "the great sea" of the Hebrews, "the sea" of the Greeks, the "*mare nostrum*" of the Romans, bordered by orange-trees, aloes, cacti, and sea-pines; embalmed with the perfume of the myrtle, surrounded by rude mountains, saturated with pure and transparent air, but incessantly worked by underground fires; a perfect battlefield in which Neptune and Pluto still dispute the empire of the world!

It is upon these banks, and on these waters, says Michelet, that man is renewed in one of the most powerful climates of the globe. But, beautiful as it was, I could only take a rapid glance at the basin whose superficial area is two million of square yards. Even Captain Nemo's knowledge was lost to me, for this puzzling person did not appear once during our passage at full speed. I estimated the course which the *Nautilus* took under the waves of the sea at about six hundred leagues, and it was accomplished in forty-eight hours. Starting on the morning of the 16th of February from the shores of Greece, we had crossed the Straits of Gibraltar by sunrise on the 18th.

It was plain to me that this Mediterranean, enclosed in the midst of those countries which he wished to avoid, was distasteful to Captain Nemo. Those waves and those breezes brought back too many remembrances, if not too many regrets. Here he had no longer that independence and that liberty of gait which he had when in the open seas, and his *Nautilus* felt itself cramped between the close shores of Africa and Europe.

Our speed was now twenty-five miles an hour. It may

be well understood that Ned Land, to his great disgust, was obliged to renounce his intended flight. He could not launch the pinnace, going at the rate of twelve or thirteen yards every second. To quit the *Nautilus* under such conditions would be as bad as jumping from a train going at full speed—an imprudent thing, to say the least of it. Besides, our vessel only mounted to the surface of the waves at night to renew its stock of air ; it was steered entirely by the compass and the log.

I saw no more of the interior of this Mediterranean than a traveller by express train perceives of the landscape which flies before his eyes ; that is to say, the distant horizon, and not the nearer objects which pass like a flash of lightning.

We were then passing between Sicily and the coast of Tunis. In the narrow space between Cape Bon and the Straits of Messina the bottom of the sea rose almost suddenly. There was a perfect bank, on which there was not more than nine fathoms of water, whilst on either side the depth was ninety fathoms.

The *Nautilus* had to manœuvre very carefully so as not to strike against this submarine barrier.

I showed Conseil, on the map of the Mediterranean, the spot occupied by this reef.

“ But if you please, sir,” observed Conseil, “ it is like a real isthmus joining Europe to Africa.”

“ Yes, my boy, it forms a perfect bar to the Straits of Lybia, and the soundings of Smith have proved that in former times the continents between Cape Boco and Cape Furina were joined.”

“ I can well believe it,” said Conseil.

“ I will add,” I continued, “ that a similar barrier exists between Gibraltar and Ceuta, which in geological times formed the entire Mediterranean.”

“ What if some volcanic burst should one day raise these two barriers above the waves ? ”

“ It is not probable, Conseil.”

"Well, but allow me to finish, please, sir ; if this phenomenon should take place, it will be troublesome for M. Lesseps, who has taken so much pains to pierce the isthmus."

"I agree with you ; but I repeat, Conseil, this phenomenon will never happen. The violence of subterranean force is ever diminishing. Volcanoes, so plentiful in the first days of the world, are being extinguished by degrees ; the internal heat is weakened, the temperature of the lower strata of the globe is lowered by a perceptible quantity every century to the detriment of our globe, for its heat is its life."

"But the sun ?"

"The sun is not sufficient, Conseil. Can it give heat to a dead body ?"

"Not that I know of."

"Well, my friend, this earth will one day be that cold corpse ; it will become uninhabitable and uninhabited like the moon, which has long since lost all its vital heat."

"In how many centuries ?"

"In some hundreds of thousands of years, my boy."

"Then," said Conseil, "we shall have time to finish our journey—that is, if Ned Land does not interfere with it."

And Conseil, reassured, returned to the study of the bank, which the *Nautilus* was skirting at a moderate speed.

During the night of the 16th and 17th February we had entered the second Mediterranean basin, the greatest depth of which was 1,450 fathoms. The *Nautilus*, by the action of its crew, slid down the inclined planes and buried itself in the lowest depths of the sea.

On the 18th of February, about three o'clock in the morning, we were at the entrance of the Straits of Gibraltar. There once existed two currents : an upper one, long since recognised, which conveys the waters of the ocean into the basin of the Mediterranean ; and a lower counter-current, which reasoning has now shown to exist. Indeed, the volume

of water in the Mediterranean, incessantly added to by the waves of the Atlantic and by rivers falling into it, would each year raise the level of this sea, for its evaporation is not sufficient to restore the equilibrium. As it is not so, we must necessarily admit the existence of an under-current, which empties into the basin of the Atlantic through the Straits of Gibraltar the surplus waters of the Mediterranean. A fact indeed ; and it was this counter-current by which the *Nautilus* profited. It advanced rapidly by the narrow pass. For one instant I caught a glimpse of the beautiful ruins of the temple of Hercules, buried in the ground, according to Pliny, and with the low island which supports it ; and a few minutes later we were floating on the Atlantic.

CHAPTER VIII

VIGO BAY

THE Atlantic ! a vast sheet of water whose superficial area covers twenty-five millions of square miles, the length of which is nine thousand miles, with a mean breadth of two thousand seven hundred—an ocean whose parallel winding shores embrace an immense circumference, watered by the largest rivers of the world, the St. Lawrence, the Mississippi, the Amazon, the Plata, the Orinoco, the Niger, the Senegal, the Elbe, the Loire, and the Rhine, which carry water from the most civilised, as well as from the most savage, countries ! Magnificent field of water, incessantly ploughed by vessels of every nation, sheltered by the flags of every nation, and which terminates in those two terrible points so dreaded by mariners, Cape Horn and the Cape of Tempests.

The *Nautilus* was piercing the water with its sharp spur, after having accomplished nearly ten thousand leagues in three months and a half, a distance greater than the great circle of the earth. Where were we going now, and what was

reserved for the future ? The *Nautilus*, leaving the Straits of Gibraltar, had gone far out. It returned to the surface of the waves, and our daily walks on the platform were restored to us.

I mounted at once, accompanied by Ned Land and Conseil. At a distance of about twelve miles, Cape St. Vincent was dimly to be seen, forming the south-western point of the Spanish peninsula. A strong southerly gale was blowing. The sea was swollen and billowy ; it made the *Nautilus* rock violently. It was almost impossible to keep one's foot on the platform, which the heavy rolls of the sea beat over every instant. So we descended after inhaling some mouthfuls of fresh air.

I returned to my room, Conseil to his cabin ; but the Canadian, with a preoccupied air, followed me. Our rapid passage across the Mediterranean had not allowed him to put his project into execution, and he could not help showing his disappointment. When the door of my room was shut, he sat down and looked at me silently.

" Friend Ned," said I, " I understand you ; but you cannot reproach yourself. To have attempted to leave the *Nautilus* under the circumstances would have been folly."

Ned Land did not answer ; his compressed lips and frowning brow showed with him the violent possession this fixed idea had taken of his mind.

" Let us see," I continued ; " we need not despair yet. We are going up the coast of Portugal again ; France and England are not far off, where we can easily find refuge. Now if the *Nautilus*, on leaving the Straits of Gibraltar, had gone to the south, if it had carried us towards regions where there were no continents, I should share your uneasiness. But we know now that Captain Nemo does not fly from civilised seas, and in some days I think you can act with security."

Ned Land still looked at me fixedly ; at length his fixed lips parted, and he said, " It is for to-night."

I drew myself up suddenly. I was, I admit, little prepared for this communication. I wanted to answer the Canadian, but words would not come.

"We agreed to wait for an opportunity," continued Ned Land, "and the opportunity has arrived. This night we shall be but a few miles from the Spanish coast. It is cloudy. The wind blows freely. I have your word, M. Aronnax, and I rely upon you."

As I was silent, the Canadian approached me.

"To-night, at nine o'clock," said he. "I have warned Conseil. At that moment Captain Nemo will be shut up in his room, probably in bed. Neither the engineers nor the ship's crew can see us. Conseil and I will gain the central staircase, and you, M. Aronnax, will remain in the library, two steps from us, waiting my signal. The oars, the mast, and the sail are in the canoe. I have even succeeded in getting some provisions. I have procured an English wrench, to unfasten the bolts which attach it to the shell of the *Nautilus*. So all is ready, till to-night."

"The sea is bad."

"That I allow," replied the Canadian; "but we must risk that. Liberty is worth paying for; besides, the boat is strong, and a few miles with a fair wind to carry us is no great thing. Who knows but by to-morrow we may be a hundred leagues away? Let circumstances only favour us, and by ten or eleven o'clock we shall have landed on some spot of *terra firma*, alive or dead. But adieu now till to-night."

With these words the Canadian withdrew, leaving me almost dumb. I had imagined that, the chance gone, I should have time to reflect and discuss the matter. My obstinate companion had given me no time; and, after all, what could I have said to him? Ned Land was perfectly right. There was almost the opportunity to profit by. Could I retract my word, and take upon myself the responsibility of compromising the future of my companions? To-morrow Captain Nemo might take us far from all land.

At that moment a rather loud hissing noise told me that

the reservoirs were filling, and that the *Nautilus* was sinking under the waves of the Atlantic.

A sad day I passed, between the desire of regaining my liberty of action and of abandoning the wonderful *Nautilus*, and leaving my submarine studies incomplete.

What dreadful hours I passed thus ! Sometimes seeing myself and companions safely landed, sometimes wishing, in spite of my reason, that some unforeseen circumstances would prevent the realisation of Ned Land's project.

Twice I went to the saloon. I wished to consult the compass. I wished to see if the direction the *Nautilus* was taking was bringing us nearer or taking us farther from the coast. But no ; the *Nautilus* kept in Portuguese waters.

I must therefore take my part and prepare for flight. My luggage was not heavy ; my notes, nothing more.

As to Captain Nemo, I asked myself what he would think of our escape ; what trouble, what wrong it might cause him, and what he might do in case of its discovery or failure. Certainly I had no cause to complain of him ; on the contrary, never was hospitality freer than his. In leaving him I could not be taxed with ingratitude. No oath bound us to him. It was on the strength of circumstances he relied, and not upon our word, to fix us for ever.

I had not seen the Captain since our visit to the Island of Santorin. Would chance bring me to his presence before our departure ? I wished it, and I feared it at the same time. I listened if I could hear him walking in the room contiguous to mine. No sound reached my ear. I felt an unbearable uneasiness. This day of waiting seemed eternal. Hours struck too slowly to keep pace with my impatience.

My dinner was served in my room as usual. I ate but little ; I was too preoccupied. I left the table at seven o'clock. A hundred and twenty minutes (I counted them) still separated me from the moment in which I was to join Ned Land. My agitation redoubled. My pulse beat violently.

I could not remain quiet. I went and came, hoping to calm my troubled spirit by constant movement. The idea of failure in our bold enterprise was the least painful of my anxieties ; but the thought of seeing our project discovered before leaving the *Nautilus*, of being brought before Captain Nemo, irritated, or (what was worse) saddened, at my desertion, made my heart beat.

I wanted to see the saloon for the last time. I descended the stairs and arrived in the museum, where I had passed so many useful and agreeable hours. I looked at all its riches, all its treasures, like a man on the eve of an eternal exile, who was leaving never to return.

These wonders of Nature, these masterpieces of art, amongst which for so many days my life had been concentrated, I was going to abandon them for ever ! I should like to have taken a last look through the windows of the saloon into the waters of the Atlantic : but the panels were hermetically closed, and a cloak of steel separated me from that ocean which I had not yet explored.

In passing through the saloon, I came near the door let into the angle which opened into the Captain's room. To my great surprise, this door was ajar. I drew back involuntarily. If Captain Nemo should be in his room, he could see me. But, hearing no sound, I drew nearer. The room was deserted. I pushed open the door and took some steps forward. Still the same monklike severity of aspect.

Suddenly the clock struck eight. The first beat of the hammer on the bell awoke me from my dreams. I trembled as if an invisible eye had plunged into my most secret thoughts, and I hurried from the room.

There my eye fell upon the compass. Our course was still north. The log indicated moderate speed, the manometer a depth of about sixty feet.

I returned to my room, clothed myself warmly—sea-boots, an otterskin cap, a great coat of byssus, lined with sealskin ; I was ready, I was waiting. The vibration of the screw alone broke the deep silence which reigned on board.

I listened attentively. Would no loud voice suddenly inform me that Ned Land had been surprised in his projected flight. A mortal dread hung over me, and I vainly tried to regain my accustomed coolness.

At a few minutes to nine, I put my ear to the Captain's door. No noise. I left my room and returned to the saloon, which was half in obscurity, but deserted.

I opened the door communicating with the library. The same insufficient light, the same solitude. I placed myself near the door leading to the central staircase, and there waited for Ned Land's signal.

At that moment the trembling of the screw sensibly diminished, then it stopped entirely. The silence was now only disturbed by the beatings of my own heart. Suddenly a slight shock was felt ; and I knew that the *Nautilus* had stopped at the bottom of the ocean. My uneasiness increased. The Canadian's signal did not come. I felt inclined to join Ned Land and beg of him to put off his attempt. I felt that we were not sailing under our usual conditions.

At this moment the door of the large saloon opened, and Captain Nemo appeared. He saw me, and without further preamble began in an amiable tone of voice :

" Ah, sir ! I have been looking for you. Do you know the history of Spain ? "

Now, one might know the history of one's own country by heart ; but in the condition I was at the time, with troubled mind and head quite lost, I could not have said a word of it.

" Well," continued Captain Nemo, " you heard my question ! Do you know the history of Spain ? "

" Very slightly," I answered.

" Well, here are learned men having to learn," said the Captain. " Come, sit down, and I will tell you a curious episode in this history. Sir, listen well," said he ; " this history will interest you on one side, for it will answer a question which doubtless you have not been able to solve."

"I listen, Captain," said I, not knowing what my interlocutor was driving at, and asking myself if this incident was bearing on our projected flight.

"Sir, if you have no objection, we will go back to 1702. You cannot be ignorant that your king, Louis XIV, thinking that the gesture of a potentate was sufficient to bring the Pyrenees under his yoke, had imposed the Duke of Anjou, his grandson, on the Spaniards. This prince reigned more or less badly under the name of Philip V, and had a strong party against him abroad. Indeed, the preceding year, the royal houses of Holland, Austria, and England had concluded a treaty of alliance at the Hague, with the intention of plucking the crown of Spain from the head of Philip V, and placing it on that of an archduke to whom they prematurely gave the title of Charles III.

"Spain must resist this coalition ; but she was almost entirely unprovided with either soldiers or sailors. However, money would not fail them, provided that their galleons, laden with gold and silver from America, once entered their ports. And about the end of 1702 they expected a rich convoy which France was escorting with a fleet of twenty-three vessels, commanded by Admiral Chateau-Renaud, for the ships of the coalition were already beating the Atlantic. This convoy was to go to Cadiz, but the Admiral, hearing that an English fleet was cruising in those waters, resolved to make for a French port.

"The Spanish commanders of the convoy objected to this decision. They wanted to be taken to a Spanish port, and, if not to Cadiz, into Vigo Bay, situated on the north-west coast of Spain, and which was not blocked.

"Admiral Chateau-Renaud had the rashness to obey this injunction, and the galleons entered Vigo Bay.

"Unfortunately, it formed an open road which could not be defended in any way. They must therefore hasten to unload the galleons before the arrival of the combined fleet ; and time would not have failed them had not a miserable question of rivalry suddenly arisen.

“ You are following the chain of events ? ” asked Captain Nemo.

“ Perfectly,” said I, not knowing the end proposed by this historical lesson.

“ I will continue. This is what passed. The merchants of Cadiz had a privilege by which they had the right of receiving all merchandise coming from the West Indies. Now, to disembark these ingots at the port of Vigo was depriving them of their rights. They complained at Madrid, and obtained the consent of the weak-minded Philip that the convoy, without discharging its cargo, should remain sequestered in the roads of Vigo until the enemy had disappeared.

“ But whilst coming to this decision, on the 22nd of October, 1702, the English vessels arrived in Vigo Bay, when Admiral Chateau-Renaud, in spite of inferior forces, fought bravely. But, seeing that the treasure must fall into the enemy’s hands, he burnt and scuttled every galleon, which went to the bottom with their immense riches.”

Captain Nemo stopped. I admit I could not see yet why this history should interest me.

“ Well ? ” I asked.

“ Well, M. Aronnax,” replied Captain Nemo, “ we are in that Vigo Bay ; and it rests with yourself whether you will penetrate its mysteries.”

The Captain rose, telling me to follow him. I had had time to recover. I obeyed. The saloon was dark, but through the transparent glass the waves were sparkling. I looked.

For half a mile around the *Nautilus*, the waters seemed bathed in electric light. The sandy bottom was clean and bright. Some of the ship’s crew in their diving-dresses were clearing away half-rotten barrels and empty cases from the midst of the blackened wrecks. From these cases and from these barrels escaped ingots of gold and silver, cascades of piastres and jewels. The sand was heaped up with them. Laden with their precious booty, the men returned to the

Nautilus, disposed of their burden, and went back to this inexhaustible fishery of gold and silver.

I understood now. This was the scene of the battle of the 22nd of October, 1702. Here on this very spot the galleons laden for the Spanish Government had sunk. Here Captain Nemo came, according to his wants, to pack up those millions with which he burdened the *Nautilus*. It was for him and him alone America had given up her precious metals. He was heir direct, without anyone to share, in those treasures torn from the Incas and from the conquered of Ferdinand Cortez.

"Did you know, sir," he asked, smiling, "that the sea contained such riches?"

"I knew," I answered, "that they value money held in suspension in these waters at two millions."

"Doubtless; but to extract this money the expense would be greater than the profit. Here, on the contrary, I have but to pick up what man has lost—and not only in Vigo Bay, but in a thousand other ports where shipwrecks have happened, and which are marked on my submarine map. Can you understand now the source of the millions I am worth?"

"I understand, Captain. But allow me to tell you that in exploring Vigo Bay you have only been beforehand with a rival society."

"And which?"

"A society which has received from the Spanish Government the privilege of seeking those buried galleons. The shareholders are led on by the allurements of an enormous bounty, for they value these rich shipwrecks at five hundred millions."

"Five hundred millions they were," answered Captain Nemo, "but they are no longer."

"Just so," said I; "and a warning to those shareholders would be an act of charity. But who knows if it would be well received? What gamblers usually regret above all is less the loss of their money than of their foolish hopes. After

all, I pity them less than the thousands of unfortunates to whom so much riches well-distributed would have been profitable, whilst for them they will be for ever barren."

I had no sooner expressed this regret than I felt that it must have wounded Captain Nemo.

"Barren!" he exclaimed, with animation. "Do you think then, sir, that these riches are lost because I gather them? Is it for myself alone, according to your idea, that I take the trouble to collect these treasures? Who told you that I did not make a good use of it? Do you think I am ignorant that there are suffering beings and oppressed races on this earth, miserable creatures to console, victims to avenge? Do you not understand?"

Captain Nemo stopped at these last words, regretting perhaps that he had spoken so much. But I had guessed that, whatever the motive which had forced him to seek independence under the sea, it had left him still a man, that his heart still beat for the sufferings of humanity, and that his immense charity was for oppressed races as well as individuals. And I then understood for whom those millions were destined which were forwarded by Captain Nemo when the *Nautilus* was cruising in the waters of Crete.

CHAPTER IX

A VANISHED CONTINENT

The next morning, the 19th of February, I saw the Canadian enter my room. I expected this visit. He looked very disappointed.

"Well, sir?" said he.

"Well, Ned, fortune was against us yesterday."

"Yes; that Captain must needs stop exactly at the hour we intended leaving his vessel."

"Yes, Ned, he had business at his bankers."

"His bankers!"

“Or rather his banking-house ; by that I mean the ocean, where his riches are safer than in the chests of the State.”

I then related to the Canadian the incidents of the preceding night, hoping to bring him back to the idea of not abandoning the Captain ; but my recital had no other result than an energetically expressed regret from Ned that he had not been able to take a walk on the battlefield of Vigo on his own account.

“However,” said he, “all is not ended. It is only a blow of the harpoon lost. Another time we must succeed ; and to-night, if necessary——”

“In what direction is the *Nautilus* going ? ” I asked.

“I do not know,” replied Ned.

“Well, at noon we shall see the point.”

The Canadian returned to Conseil. As soon as I was dressed, I went into the saloon. The compass was not reassuring. The course of the *Nautilus* was S.S.W. We were turning our backs on Europe.

I waited with some impatience till the ship's place was pricked on the chart. At about half-past eleven the reservoirs were emptied, and our vessel rose to the surface of the ocean. I rushed towards the platform. Ned Land had preceded me. No more land in sight. Nothing but an immense sea. Some sails on the horizon, doubtless those going to San Roque in search of favourable winds for doubling the Cape of Good Hope. The weather was cloudy. A gale of wind was preparing. Ned raved, and tried to pierce the cloudy horizon. He still hoped that behind all that fog stretched the land he so longed for.

At noon the sun showed itself for an instant. The second profited by this brightness to take its height. Then, the sea becoming more billowy, we descended, and the panel closed.

An hour after, upon consulting the chart, I saw the position of the *Nautilus* was marked at $16^{\circ} 17'$ long., and $33^{\circ} 22'$ lat., at 150 leagues from the nearest coast. There

was no means of flight, and I leave you to imagine the rage of the Canadian when I informed him of our situation.

For myself, I was not particularly sorry. I felt lightened of the load which had oppressed me, and was able to return with some degree of calmness to my accustomed work.

That night, about eleven o'clock, I received a most unexpected visit from Captain Nemo. He asked me very graciously if I felt fatigued from my watch of the preceding night. I answered in the negative.

"Then, M. Aronnax, I propose a curious excursion."

"Propose, Captain?"

"You have hitherto only visited the submarine depths by daylight, under the brightness of the sun. Would it suit you to see them in the darkness of the night?"

"Most willingly."

"I warn you, the way will be tiring. We shall have far to walk, and must climb a mountain. The roads are not well kept."

"What you say, Captain, only heightens my curiosity; I am ready to follow you."

"Come then, sir, we will put on our diving-dresses."

Arrived at the robing-room, I saw that neither of my companions nor any of the ship's crew were to follow us on this excursion. Captain Nemo had not even proposed my taking with me either Ned or Conseil.

In a few moments we had put on our diving-dresses; they placed on our backs the reservoirs, abundantly filled with air, but no electric lamps were prepared. I called the Captain's attention to the fact.

"They will be useless," he replied.

I thought I had not heard aright, but I could not repeat my observation, for the Captain's head had already disappeared in its metal case. I finished harnessing myself. I felt them put an iron-pointed stick into my hand, and some minutes later, after going through the usual form, we set foot on the bottom of the Atlantic at a depth of 150 fathoms. Midnight was near. The waters were profoundly

dark, but Captain Nemo pointed out in the distance a reddish spot, a sort of large light shining brilliantly about two miles from the *Nautilus*. What this fire might be, what could feed it, why and how it lit up the liquid mass, I could not say. In any case, it did light our way, vaguely, it is true, but I soon accustomed myself to the peculiar darkness, and I understood, under such circumstances, the uselessness of the Ruhmkorff apparatus.

As we advanced, I heard a kind of pattering above my head. The noise redoubling, sometimes producing a continual shower, I soon understood the cause. It was rain falling violently, and crisping the surface of the waves. Instinctively the thought flashed across my mind that I should be wet through ! By the water ! in the midst of the water ! I could not help laughing at the odd idea. But, indeed, in the thick diving-dress, the liquid element is no longer felt, and one only seems to be in an atmosphere somewhat denser than the terrestrial atmosphere. Nothing more.

After half an hour's walk the soil became stony. Medusæ, microscopic crustacea, and pennatules lit it slightly with their phosphorescent gleam. I caught a glimpse of pieces of stone covered with millions of zoophytes and masses of seaweed. My feet often slipped upon this sticky carpet of seaweed, and without my iron-tipped stick I should have fallen more than once. In turning round, I could still see the whitish lantern of the *Nautilus* beginning to pale in the distance.

But the rosy light which guided us increased and lit up the horizon. The presence of this fire under water puzzled me in the highest degree. Was I going towards a natural phenomenon as yet unknown to the savants of the earth ? Or even (for this thought crossed my brain) had the hand of man aught to do with this conflagration ? Had he fanned this flame ? Was I to meet in these depths companions and friends of Captain Nemo whom he was going to visit, and who, like him, led this strange existence ? Should I find

down there a whole colony of exiles who, weary of the miseries of this earth, had sought and found independence in the deep ocean ? All these foolish and unreasonable ideas pursued me. And in this condition of mind, over-excited by the succession of wonders continually passing before my eyes, I should not have been surprised to meet at the bottom of the sea one of those submarine towns of which Captain Nemo dreamed.

Our road grew lighter and lighter. The white glimmer came in rays from the summit of a mountain about 800 feet high. But what I saw was simply a reflection, developed by the clearness of the waters. The source of this inexplicable light was a fire on the opposite side of the mountain.

In the midst of this stony maze furrowing the bottom of the Atlantic, Captain Nemo advanced without hesitation. He knew this dreary road. Doubtless he had often travelled over it, and could not lose himself. I followed him with unshaken confidence. He seemed to me like a genie of the sea ; and, as he walked before me, I could not help admiring his stature, which was outlined in black on the luminous horizon.

It was one in the morning when we arrived at the first slopes of the mountain ; but to gain access to them we must venture through the difficult paths of a vast copse.

Yes ; a copse of dead trees, without leaves, without sap, trees petrified by the action of the water and here and there overtopped by gigantic pines. It was like a coal-pit still standing, holding by the roots to the broken soil, and whose branches, like fine black paper cuttings, showed distinctly on the watery ceiling. Picture to yourself a forest in the Hartz hanging on to the sides of the mountain, but a forest swallowed up. The paths were encumbered with seaweed and fucus, between which grovelled a whole world of crustacea. I went along, climbing the rocks, striding over extended trunks, breaking the sea bind-weed which hung from one tree to the other ; and frightening the fishes, which flew from branch to branch. Pressing onward,

I felt no fatigue. I followed my guide, who was never tired. What a spectacle ! How can I express it ? how paint the aspect of those woods and rocks in this medium—their under parts dark and wild, the upper coloured with red tints, by that light which the reflecting powers of the waters doubled ? We climbed rocks which fell directly after with gigantic bounds and the low growling of an avalanche. To right and left ran long, dark galleries, where sight was lost. Here opened vast glades which the hand of man seemed to have worked ; and I sometimes asked myself if some inhabitant of these submarine regions would not suddenly appear to me.

But Captain Nemo was still mounting. I could not stay behind. I followed boldly. My stick gave me good help. A false step would have been dangerous on the narrow passes sloping down to the sides of the gulfs ; but I walked with firm step, without feeling any giddiness. Now I jumped a crevice, the depth of which would have made me hesitate had it been among the glaciers on the land ; now I ventured on the unsteady trunk of a tree thrown across from one abyss to the other, without looking under my feet, having only eyes to admire the wild sites of this region.

There, monumental rocks, leaning on their regularly-cut bases, seemed to defy all laws of equilibrium. From between their stony knees trees sprang, like a jet under heavy pressure, and upheld others which upheld them. Natural towers, large scarps, cut perpendicularly, like a "curtain," inclined at an angle which the laws of gravitation could never have tolerated in terrestrial regions.

Two hours after quitting the *Nautilus* we had crossed the line of trees, and a hundred feet above our heads rose the top of the mountain, which cast a shadow on the brilliant irradiation of the opposite slope. Some petrified shrubs ran fantastically here and there. Fishes got up under our feet like birds in the long grass. The massive rocks were rent with impenetrable fractures, deep grottos, and unfathomable holes, at the bottom of which formidable

creatures might be heard moving. My blood curdled when I saw enormous antennæ blocking my road, or some frightful claw closing with a noise in the shadow of some cavity. Millions of luminous spots shone brightly in the midst of the darkness. They were the eyes of giant crustacea crouched in their holes ; giant lobsters setting themselves up like halberdiers, and moving their claws with the clicking sound of pincers ; titanic crabs, pointed like a gun on its carriage ; and frightful-looking poulps, interweaving their tentacles like a living nest of serpents.

We had now arrived on the first platform, where other surprises awaited me. Before us lay some picturesque ruins, which betrayed the hand of man and not that of the Creator. There were vast heaps of stone, amongst which might be traced the vague and shadowy forms of castles and temples, clothed with a world of blossoming zoophytes, and over which, instead of ivy, sea-weed and fucus threw a thick vegetable mantle. But what was this portion of the globe which had been swallowed by cataclysms ? Who had placed those rocks and stones like cromlechs of prehistoric times ? Where was I ? Whither had Captain Nemo's fancy hurried me ?

I would fain have asked him ; not being able to, I stopped him—I seized his arm. But, shaking his head, and pointing to the highest point of the mountain, he seemed to say :

“ Come, come along ; come higher ! ”

I followed, and in a few minutes I had climbed to the top, which for a circle of ten yards commanded the whole mass of rock.

I looked down the side we had just climbed. The mountain did not rise more than seven or eight hundred feet above the level of the plain ; but on the opposite side it commanded from twice that height the depths of this part of the Atlantic. My eyes ranged far over a large space lit by a violent fulguration. In fact, the mountain was a volcano.

At fifty feet above the peak, in the midst of a rain of stones and scoriæ, a large crater was vomiting forth torrents of lava which fell in a cascade of fire into the bosom of the liquid mass. Thus situated, this volcano lit the lower plain like an immense torch, even to the extreme limits of the horizon. I said that the submarine crater threw up lava, but no flames. Flames require the oxygen of the air to feed upon and cannot be developed under water ; but streams of lava, having in themselves the principles of their incandescence, can attain a white heat, fight vigorously against the liquid element, and turn it to vapour by contact.

Rapid currents bearing all these gases in diffusion and torrents of lava slid to the bottom of the mountain like an eruption of Vesuvius on another Terra del Greco.

There indeed under my eyes, ruined, destroyed, lay a town—its roofs open to the sky, its temples fallen, its arches dislocated, its columns lying on the ground, from which one would still recognise the massive character of Tuscan architecture. Further on, some remains of a gigantic aqueduct ; here the high base of an Acropolis, with the floating outline of a Parthenon ; there traces of a quay, as if an ancient port had formerly abutted on the borders of the ocean, and disappeared with its merchant vessels and its war-galleys. Farther on again, long lines of sunken walls and broad, deserted streets—a perfect Pompeii escaped beneath the waters. Such was the sight that Captain Nemo brought before my eyes !

Where was I ? Where was I ? I must know at any cost. I tried to speak, but Captain Nemo stopped me by a gesture, and, picking up a piece of chalk-stone, advanced to a rock of black basalt, and traced the one word :

ATLANTIS

What a light shot through my mind ! Atlantis ! the Atlantis of Plato, that continent denied by Origen and Humbolt, who placed its disappearance amongst the

legendary tales. I had it there now before my eyes, bearing upon it the unexceptionable testimony of its catastrophe. The region thus engulfed was beyond Europe, Asia, and Lybia, beyond the columns of Hercules, where those powerful people, the Atlantides, lived, against whom the first wars of ancient Greeks were waged.

Thus, led by the strangest destiny, I was treading under foot the mountains of this continent, touching with my hand those ruins a thousand generations old and contemporary with the geological epochs. I was walking on the very spot where the contemporaries of the first man had walked.

Whilst I was trying to fix in my mind every detail of this grand landscape, Captain Nemo remained motionless, as if petrified in mute ecstasy, leaning on a mossy stone. Was he dreaming of those generations long since disappeared? Was he asking them the secret of human destiny? Was it here this strange man came to steep himself in historical recollections, and live again this ancient life—he who wanted no modern one? What would I not have given to know his thoughts, to share them, to understand them! We remained for an hour at this place, contemplating the vast plains under the brightness of the lava, which was sometimes wonderfully intense. Rapid tremblings ran along the mountain caused by internal bubblings, deep noise, distinctly transmitted through the liquid medium were echoed with majestic grandeur. At this moment the moon appeared through the mass of waters and threw her pale rays on the buried continent. It was but a gleam, but what an indescribable effect! The Captain rose, cast one last look on the immense plain, and then bade me follow him.

We descended the mountain rapidly, and, the mineral forest once passed, I saw the lantern of the *Nautilus* shining like a star. The Captain walked straight to it, and we got on board as the first rays of light whitened the surface of the ocean.

CHAPTER X

THE SUBMARINE COAL-MINES

THE next day, the 20th of February, I awoke very late : the fatigues of the previous night had prolonged my sleep until eleven o'clock. I dressed quickly, and hastened to find the course the *Nautilus* was taking. The instruments showed it to be still toward the south, with a speed of twenty miles an hour and a depth of fifty fathoms.

The species of fishes here did not differ much from those already noticed. There were rays of giant size, five yards long, and endowed with great muscular strength, which enabled them to shoot above the waves ; sharks of many kinds ; amongst others, one fifteen feet long, with triangular sharp teeth, and whose transparency rendered it almost invisible in the water.

Amongst bony fish Conseil noticed some about three yards long, armed at the upper jaw with a piercing sword ; other bright-coloured creatures, known in the time of Aristotle by the name of the sea-dragon, which are dangerous to capture on account of the spikes on their back.

About four o'clock, the soil, generally composed of a thick mud mixed with petrified wood, changed by degrees, and it became more stony, and seemed strewn with conglomerate and pieces of basalt, with a sprinkling of lava. I thought that a mountainous region was succeeding the long plains ; and accordingly, after a few evolutions of the *Nautilus*, I saw the southerly horizon blocked by a high wall which seemed to close all exit. Its summit evidently passed the level of the ocean. It must be a continent, or at least an island—one of the Canaries, or of the Cape Verde Islands. The bearings not being yet taken, perhaps designedly, I was ignorant of our exact position. In any case, such a wall seemed to me to mark the limits of that Atlantis, of which we had in reality passed over only the smallest part.

Much longer should I have remained at the window admiring the beauties of sea and sky, but the panels closed. At this moment the *Nautilus* arrived at the side of this high, perpendicular wall. What it would do, I could not guess. I returned to my room ; it no longer moved. I laid myself down with the full intention of waking after a few hours' sleep ; but it was eight o'clock the next day when I entered the saloon. I looked at the manometer. It told me that the *Nautilus* was floating on the surface of the ocean. Besides, I heard steps on the platform. I went to the panel. It was open ; but, instead of broad daylight, as I expected, I was surrounded by profound darkness. Where were we ? Was I mistaken ? Was it still night ? No ; not a star was shining and night has not that utter darkness.

I knew not what to think, when a voice near me said :

"Is that you, Professor ?"

"Ah ! Captain," I answered, "where are we ?"

"Underground, sir."

"Underground !" I exclaimed. "And the *Nautilus* floating still ?"

"It always floats."

"But I do not understand."

"Wait a few minutes, our lantern will be lit, and, if you like light places, you will be satisfied."

I stood on the platform and waited. The darkness was so complete that I could not even see Captain Nemo ; but, looking to the zenith, exactly above my head, I seemed to catch an undecided gleam, a kind of twilight filling a circular hole. At this instant the lantern was lit, and its vividness dispelled the faint light. I closed my dazzled eyes for an instant, and then looked again. The *Nautilus* was stationary, floating near a mountain which formed a sort of quay. The lake, then, supporting it was a lake imprisoned by a circle of walls, measuring two miles in diameter and six in circumference. Its level (the manometer showed) could only be the same as the outside level, for there must necessarily be a communication between the lake and the

sea. The high partitions, leaning forward on their base, grew into a vaulted roof bearing the shape of an immense funnel turned upside down, the height being about five or six hundred yards. At the summit was a circular orifice, by which I had caught the slight gleam of light, evidently daylight.

"Where are we?" I asked.

"In the very heart of an extinct volcano, the interior of which has been invaded by the sea, after some great convulsion of the earth. Whilst you were sleeping, Professor, the *Nautilus* penetrated to this lagoon by a natural canal, which opens about ten yards beneath the surface of the ocean. This is its harbour of refuge, a sure, commodious, and mysterious one, sheltered from all gales. Show me, if you can, on the coasts of any of your continents or islands, a road which can give such perfect refuge from all storms."

"Certainly," I replied, "you are in safety here, Captain Nemo. Who could reach you in the heart of a volcano? But did I not see an opening at its summit?"

"Yes; its crater, formerly filled with lava, vapour, and flames, and which now gives entrance to the life-giving air we breathe."

"But what is this volcanic mountain?"

"It belongs to one of the numerous islands with which this sea is strewn—to vessels a simple sandbank—to us an immense cavern. Chance led me to discover it, and chance served me well."

"But of what use is this refuge, Captain? The *Nautilus* wants no port."

"No, sir; but it wants electricity to make it move, and the wherewithal to make the electricity—sodium to feed the elements, coal from which to get the sodium, and a coal-mine to supply the coal. And exactly on this spot the sea covers entire forests embedded during the geological periods, now mineralised and transformed into coal; for me they are an inexhaustible mine."

"Your men follow the trade of miners here, then, Captain?"

"Exactly so. These mines extend under the waves like the mines of Newcastle. Here, in their diving-dresses, pick-axe and shovel in hand, my men extract the coal, which I do not even ask from the mines of the earth. When I burn this combustible for the manufacture of sodium, the smoke, escaping from the crater of the mountain, gives it the appearance of a still-active volcano."

"And we shall see your companions at work?"

"No; not this time at least; for I am in a hurry to continue our submarine tour of the earth. So I shall content myself with drawing from the reserve of sodium I already possess. The time for loading is one day only, and we continue our voyage. So, if you wish to go over the cavern and make the round of the lagoon, you must take advantage of to-day, M. Aronnax."

I thanked the Captain and went to look for my companions, who had not yet left their cabin. I invited them to follow me without saying where we were. They mounted the platform. Conseil, who was astonished at nothing, seemed to look upon it as quite natural that he should wake under a mountain, after having fallen asleep under the waves. But Ned Land thought of nothing but finding whether the cavern had any exit. After breakfast, about ten o'clock, we went down on to the mountain.

"Here we are, once more on land," said Conseil.

"I do not call this land," said the Canadian. "And besides, we are not on it, but beneath it."

Between the walls of the mountains and the waters of the lake lay a sandy shore which, at its greatest breadth, measured five hundred feet. On this soil one might easily make the tour of the lake. But the base of the high partitions was stony ground, with volcanic blocks and enormous pumice-stones lying in picturesque heaps. All these detached masses, covered with enamel, polished by the action of the subterraneous fires, shone resplendent by the light of our

electric lantern. The mica dust from the shore, rising under our feet, flew like a cloud of sparks. The bottom now rose sensibly, and we soon arrived at long circuitous slopes, or inclined planes, which took us higher by degrees ; but we were obliged to walk carefully among these conglomerates, bound by no cement, the feet slipping on the glassy crystal, felspar, and quartz.

The volcanic nature of this enormous excavation was confirmed on all sides, and I pointed it out to my companions.

"Picture to yourselves," said I, "what this crater must have been when filled with boiling lava, and when the level of the incandescent liquid rose to the orifice of the mountain, as though melted on the top of a hot plate."

"I can picture it perfectly," said Conseil. "But, sir, will you tell me why the Great Architect has suspended operations, and how it is that the furnace is replaced by the quiet waters of the lake?"

"Most probably, Conseil, because some convulsion beneath the ocean produced that very opening which has served as a passage for the *Nautilus*. Then the waters of the Atlantic rushed into the interior of the mountain. There must have been a terrible struggle between the two elements, a struggle which ended in the victory of Neptune. But many ages have run out since then, and the submerged volcano is now a peaceable grotto."

"Very well," replied Ned Land ; "I accept the explanation, sir ; but, in our own interests, I regret that the opening of which you speak was not made above the level of the sea."

"But, friend Ned," said Conseil, "if the passage had not been under the sea, the *Nautilus* could not have gone through it."

We continued ascending. The steps became more and more perpendicular and narrow. Deep excavations, which we were obliged to cross, cut them here and there ; sloping masses had to be turned. We slid upon our knees and crawled along. But Conseil's dexterity and the Canadian's

strength surmounted all obstacles. At a height of about 31 feet the nature of the ground changed without becoming more practicable. To the conglomerate and trachyte succeeded black basalt, the first dispread in layers full of bubbles, the latter forming regular prisms, placed like a colonnade supporting the spring of the immense vault, an admirable specimen of natural architecture. Between the blocks of basalt wound long streams of lava, long since grown cold, encrusted with bituminous rays ; and in some places there were spread large carpets of sulphur. A more powerful light shone through the upper crater, shedding a vague glimmer over these volcanic depressions for ever buried in the bosom of this extinguished mountain. But our upward march was soon stopped at a height of about two hundred and fifty feet by impassable obstacles. There was a complete vaulted arch overhanging us, and our ascent was changed to a circular walk. At the last change vegetable life began to struggle with the mineral. Some shrubs, and even some trees, grew from the fractures of the walls. I recognised some euphorbias, with the caustic sugar coming from them ; heliotropes, quite incapable of justifying their name, sadly drooped their clusters of flowers, both their colour and perfume half gone. Here and there some chrysanthemums grew timidly at the foot of an aloe with long, sickly-looking leaves. But between the streams of lava, I saw some little violets still slightly perfumed, and I admit that I smelt them with delight. Perfume is the soul of the flower, and sea-flowers have no soul.

We had arrived at the foot of some sturdy dragon-trees, which had pushed aside the rocks with their strong roots. when Ned Land exclaimed :

" Ah ! sir, a hive ! a hive ! "

" A hive ! " I replied, with a gesture of incredulity.

" Yes, a hive," repeated the Canadian, " and bees humming round it."

I approached, and was bound to believe my own eyes. There at a hole bored in one of the dragon-trees were some

thousands of these ingenious insects, so common in all the Canaries, and whose produce is so much esteemed. Naturally enough, the Canadian wished to gather the honey, and I could not well oppose his wish. A quantity of dry leaves, mixed with sulphur, he lit with a spark from his flint, and he began to smoke out the bees. The humming ceased by degrees, and the hive eventually yielded several pounds of the sweetest honey, with which Ned Land filled his haversack.

"When I have mixed this honey with the paste of the bread-fruit," said he, "I shall be able to offer you a succulent cake."

"'Pon my word," said Conseil, "it will be gingerbread."

"Never mind the gingerbread," said I ; "let us continue our interesting walk."

At every turn of the path we were following, the lake appeared in all its length and breadth. The lantern lit up the whole of its peaceable surface, which knew neither ripple nor wave. The *Nautilus* remained perfectly immovable. On the platform, and on the mountain, the ship's crew were working like black shadows clearly carved against the luminous atmosphere. We were now going round the highest crest of the first layers of rock which upheld the roof. I then saw that bees were not the only representatives of the animal kingdom in the interior of this volcano. Birds of prey hovered here and there in the shadows, or fled from their nests on the top of the rocks. There were sparrow-hawks, with white breasts, and kestrels, and down the slopes scampered, with their long legs, several fine fat bustards. I leave anyone to imagine the covetousness of the Canadian at the sight of this savoury game, and whether he did not regret having no gun. But he did his best to replace the lead by stones, and, after several fruitless attempts, he succeeded in wounding a magnificent bird. To say that he risked his life twenty times before reaching it is but the truth ; but he managed so well that the creature joined the honey-cakes in his bag. We were now obliged to descend

toward the shore, the crest becoming impracticable. Above us the crater seemed to gape like the mouth of a well. From this place the sky could be clearly seen, and clouds, dissipated by the west wind, leaving behind them, even on the summit of the mountain, their misty remnants—certain proof that they were only moderately high, for the volcano did not rise more than eight hundred feet above the level of the ocean. Half an hour after the Canadian's last exploit we had regained the inner shore. Here the flora was represented by large carpets of marine crystal, a little umbelliferous plant very good to pickle, which also bears the name of pierce-stone and sea-fennel. Conseil gathered some bundles of it. As to the fauna, it might be counted by thousands of crustacea of all sorts, lobsters, crabs, spider-crabs, chameleon shrimps, and a large number of shells, rockfish, and limpets. Three-quarters of an hour later we had finished our circuitous walk and were on board. The crew had just finished loading the sodium, and the *Nautilus* could have left that instant. But Captain Nemo gave no order. Did he wish to wait until night, and leave the submarine passage secretly? Perhaps so. Whatever it might be, the next day, the *Nautilus*, having left its port, steered clear of all land at a few yards beneath the waves of the Atlantic.

CHAPTER XI

THE SARGASSO SEA

That day the *Nautilus* crossed a singular part of the Atlantic Ocean. No one can be ignorant of the existence of a current of warm water known by the name of the Gulf Stream. After leaving the Gulf of Florida, we went in the direction of Spitzbergen. But before entering the Gulf of Mexico, about 45° of N. lat., this current divides into two arms, the principal one going towards the coast of Ireland and Norway, whilst the second bends to the south about

the height of the Azores ; then, touching the African shore, and describing a lengthened oval, returns to the Antilles. This second arm—it is rather a collar than an arm—surrounds with its circles of warm water that portion of the cold, quiet, immovable ocean called the Sargasso Sea, a perfect lake in the open Atlantic : it takes no less than three years for the great current to pass round it. Such was the region the *Nautilus* was now visiting, a perfect meadow, a close carpet of seaweed, fucus, and tropical berries, so thick and so compact that the stem of a vessel could hardly tear its way through it. And Captain Nemo, not wishing to entangle his screw in this herbaceous mass, kept some yards beneath the surface of the waves. The name Sargasso comes from the Spanish word “sargazzo” which signifies kelp. This kelp, or berry-plant, is the principal formation of this immense bank. And this is the reason why these plants unite in the peaceful basin of the Atlantic. The only explanation which can be given, he says, seems to me to result from the experience known to all the world. Place in a vase some fragments of cork or other floating body, and give to the water in the vase a circular movement, the scattered fragments will unite in a group in the centre of the liquid surface, that is to say, in the part least agitated. In the phenomenon we are considering, the Atlantic is the vase, the Gulf Stream the circular current, and the Sargasso Sea the central point at which the floating bodies unite.

I share Maury's opinion, and I was able to study the phenomenon in the very midst, where vessels rarely penetrate. Above us floated products of all kinds, heaped up among these brownish plants ; trunks of trees torn from the Andes or the Rocky Mountains, and floated by the Amazon or the Mississippi ; numerous wrecks, remains of keels, or ships' bottoms, side-planks stove in, and so weighted with shells and barnacles that they could not again rise to the surface. And time will one day justify Maury's other opinion, that these substances thus accumulated for ages will become petrified by the action of the water and will

then form inexhaustible coal-mines—a precious reserve prepared by far-seeing Nature for the moment when men shall have exhausted the mines of continents.

In the midst of this inextricable mass of plants and seaweed, I noticed some charming pink halcyons and actiniæ, with their long tentacles trailing after them, and medusæ, green, red, and blue.

All the day of the 22nd of February we passed in the Sargasso Sea, where such fish as are partial to marine plants find abundant nourishment. The next, the ocean had returned to its accustomed aspect. From this time for nineteen days, from the 23rd of February to the 12th of March, the *Nautilus* kept in the middle of the Atlantic, carrying us at a constant speed of a hundred leagues in twenty-four hours. Captain Nemo evidently intended accomplishing his submarine programme, and I imagined that he intended, after doubling Cape Horn, to return to the Australian seas of the Pacific. Ned Land had cause for fear. In these large seas, void of islands, we could not attempt to leave the boat. Nor had we any means of opposing Captain Nemo's will. Our only course was to submit; but what we could neither gain by force nor cunning, I liked to think might be obtained by persuasion. This voyage ended, would he not consent to restore our liberty, under an oath never to reveal his existence?—an oath of honour which we should have religiously kept. But we must consider that delicate question with the Captain. But was I free to claim this liberty? Had he not himself said from the beginning, in the firmest manner, that the secret of his life exacted from him our lasting imprisonment on board the *Nautilus*? And would not my four months' silence appear to him a tacit acceptance of our situation? And would not a return to the subject result in raising suspicions which might be hurtful to our projects, if at some future time a favourable opportunity offered to return to them?

During the nineteen days mentioned above, no incident

of any kind happened to signalise our voyage. I saw little of the Captain ; he was at work. In the library I often found his books left open, especially those on natural history. My work on submarine depths, conned over by him, was covered with marginal notes, often contradicting my theories and systems ; but the Captain contented himself with thus purging my work ; it was very rare for him to discuss it with me. Sometimes I heard the melancholy tones of his organ ; but only at night, in the midst of the deepest obscurity, when the *Nautilus* slept upon the deserted ocean. During this part of our voyage we sailed whole days on the surface of the waves. The sea seemed abandoned. A few sailing-vessels, on the road to India, were making for the Cape of Good Hope. One day we were followed by the boats of a whaler, who, no doubt, took us for some enormous whale of great price ; but Captain Nemo did not wish the worthy fellows to lose their time and trouble, so ended the chase by plunging under the water. Our navigation continued until the 13th of March ; that day the *Nautilus* was employed in taking soundings, which greatly interested me. We had then made about 13,000 leagues since our departure from the high seas of the Pacific. The bearings gave us $45^{\circ} 37'$ S. lat., and $37^{\circ} 53'$ W. long. It was the same water in which Captain Denham of the *Herald* sounded 7,000 fathoms without finding the bottom. There, too, Lieutenant Parker, of the American frigate *Congress*, could not touch the bottom with 15,140 fathoms. Captain Nemo intended seeking the bottom of the ocean by a diagonal sufficiently lengthened by means of lateral planes placed at an angle of 45° with the water-line of the *Nautilus*. Then the screw set to work at its maximum speed, its four blades beating the waves with indescribable force. Under this powerful pressure, the hull of the *Nautilus* quivered like a sonorous chord and sank regularly under the water.

At 7,000 fathoms I saw some blackish tops rising from the midst of the waters ; but these summits might belong to high mountains like the Himalayas or Mont Blanc, even

higher ; and the depth of the abyss remained incalculable. The *Nautilus* descended still lower, in spite of the great pressure. I felt the steel plates tremble at the fastenings of the bolts ; its bars bent, its partitions groaned ; the windows of the saloon seemed to curve under the pressure of the waters. And this firm structure would doubtless have yielded, if, as its Captain had said, it had not been capable of resistance like a solid block. We had attained a depth of 16,000 yards (four leagues), and the sides of the *Nautilus* then bore a pressure of 1,600 atmospheres, that is to say, 3,200 lb. to each square two-fifths of an inch of its surface.

“ What a situation to be in ! ” I exclaimed. “ To overrun these deep regions where man has never trod ! Look, Captain, look at these magnificent rocks, these uninhabited grottoes, these lowest receptacles of the globe, where life is no longer possible ! What unknown sights are here ! Why should we be unable to preserve a remembrance of them ? ”

“ Would you like to carry away more than the remembrance ? ” said Captain Nemo.

“ What do you mean by those words ? ”

“ I mean to say that nothing is easier than to take a photographic view of this submarine region.”

I had not time to express my surprise at this new proposition, when, at Captain Nemo's call, an objective was brought into the saloon. Through the widely-opened panel, the liquid mass was bright with electricity, which was distributed with such uniformity that not a shadow, not a gradation, was to be seen in our manufactured light. The *Nautilus* remained motionless, the force of its screw subdued by the inclination of its planes : the instrument was propped on the bottom of the oceanic site, and in a few seconds we had obtained a perfect negative.

But, the operation being over, Captain Nemo said, “ Let us go up ; we must not abuse our position, nor expose the *Nautilus* too long to such great pressure.”

“Go up again !” I exclaimed.

“Hold well on.”

I had not time to understand why the Captain cautioned me thus, when I was thrown forward on to the carpet. At a signal from the Captain, its screw was shipped, and its blades raised vertically ; the *Nautilus* shot into the air like a balloon, rising with stunning rapidity, and cutting the mass of waters with a sonorous agitation. Nothing was visible ; and in four minutes it had shot through the four leagues which separated it from the ocean, and, after emerging like a flying-fish, fell, making the waves rebound to an enormous height.

CHAPTER XII

CACHALOTS AND WHALES

During the nights of the 13th and 14th of March, the *Nautilus* returned to its southerly course. I fancied that, when on a level with Cape Horn, he would turn the helm westward, in order to beat the Pacific seas, and so complete the tour of the world. He did nothing of the kind, but continued on his way to the southern regions. Where was he going to ? To the pole ? It was madness ! I began to think that the Captain's temerity justified Ned Land's fears. For some time past the Canadian had not spoken to me of his projects of flight ; he was less communicative, almost silent. I could see that this lengthened imprisonment was weighing upon him, and I felt that rage was burning within him. When he met the Captain, his eyes lit up with suppressed anger ; and I feared that his natural violence would lead him into some extreme. That day, the 14th of March, Conseil and he came to me in my room. I inquired the cause of their visit.

“A simple question to ask you, sir,” replied the Canadian.

“Speak, Ned.”

"How many men are there on board the *Nautilus*, do you think?"

"I cannot tell, my friend."

"I should say that its working does not require a large crew."

"Certainly, under existing conditions, ten men, at the most, ought to be enough."

"Well, why should there be any more?"

"Why?" I replied, looking fixedly at Ned Land, whose meaning was easy to guess. "Because," I added, "if my surmises are correct, and if I have well understood the Captain's existence, the *Nautilus* is not only a vessel: it is also a place of refuge for those who, like its commander, have broken every tie upon earth."

"Perhaps so," said Conseil; "but, in any case, the *Nautilus* can only contain a certain number of men. Could not you, sir, estimate their maximum?"

"How, Conseil?"

"By calculation; given the size of the vessel, which you know, sir, and consequently the quantity of air it contains, knowing also how much each man expends at a breath, and comparing these results with the fact that the *Nautilus* is obliged to go to the surface every twenty-four hours."

Conseil had not finished the sentence before I saw what he was driving at.

"I understand," said I; "but that calculation, though simple enough, can give but a very uncertain result."

"Never mind," said Ned Land urgently.

"Here it is, then," said I. "In one hour each man consumes the oxygen contained in twenty gallons of air; and in twenty-four, that contained in 480 gallons. We must, therefore find how many times 480 gallons of air the *Nautilus* contains."

"Just so," said Conseil.

"Or," I continued, "the size of the *Nautilus* being 1,500 tons; and one ton holding 200 gallons, it contains

300,000 gallons of air, which, divided by 480, gives a quotient of 625. Which means to say, strictly speaking, that the air contained in the *Nautilus* would suffice for 625 men for twenty-four hours."

"Six hundred and twenty-five!" repeated Ned.

"But remember that all of us, passengers, sailors, and officers included, would not form a tenth part of that number."

"Still too many for three men," murmured Conseil.

The Canadian shook his head, passed his hand across his forehead, and left the room without answering.

"Will you allow me to make one observation, sir?" said Conseil. "Poor Ned is longing for everything that he cannot have. His past life is always present to him; everything that we are forbidden he regrets. His head is full of old recollections. And we must understand him. What has he to do here? Nothing; he is not learned like you, sir; and has not the same taste for the beauties of the sea that we have. He would risk everything to be able to go once more into a tavern in his own country."

Certainly the monotony on board must seem intolerable to the Canadian, accustomed as he was to a life of liberty and activity. Events were rare which could rouse him to any show of spirit; but that day an event did happen which recalled the bright days of the harpooner. About eleven in the morning, being on the surface of the ocean, the *Nautilus* fell in with a troop of whales—an encounter which did not astonish me, knowing that these creatures, hunted to death, had taken refuge in high latitudes.

We were seated on the platform, with a quiet sea. The month of October in those latitudes gave us some lovely autumnal days. It was the Canadian—he could not be mistaken—who signalled a whale on the eastern horizon. Looking attentively, one might see its black back rise and fall with the waves five miles from the *Nautilus*.

"Ah!" exclaimed Ned Land, "if I was on board a whaler, now such a meeting would give me pleasure. It

is one of large size. See with what strength its blow-holes throw up columns of air and steam ! Confound it, why am I bound to these steel plates ? ”

“ What, Ned,” said I, “ you have not forgotten your old ideas of fishing ? ”

“ Can a whale-fisher ever forget his old trade, sir ? Can he ever tire of the emotions caused by such a chase ? ”

“ You have never fished in these seas, Ned ? ”

“ Never, sir ; in the northern only, and as much in Behring as in Davis Straits.”

“ Then the southern whale is still unknown to you. It is the Greenland whale you have hunted up to this time, and that would not risk passing through the warm waters of the equator. Whales are localised, according to their kinds, in certain seas which they never leave. And if one of these creatures went from Behring to Davis Straits, it must be simply because there is a passage from one sea to the other, either on the American or the Asiatic side.”

“ In that case, as I have never fished in these seas, I do not know the kind of whale frequenting them ! ”

“ I have told you, Ned.”

“ A greater reason for making their acquaintance,” said Conseil.

“ Look ! look ! ” exclaimed the Canadian, “ they approach : they aggravate me ; they know that I cannot get at them ! ”

Ned stamped his feet. His hand trembled, as he grasped an imaginary harpoon.

“ Are these cetaceans as large as those of the northern seas ? ” asked he.

“ Very nearly, Ned.”

“ Because I have seen large whales, sir, whales measuring a hundred feet. I have even been told that those of Hulla-moch and Umgallick, of the Aleutian Islands, are sometimes a hundred and fifty feet long.”

"That seems to me exaggeration. These creatures are generally much smaller than the Greenland whale."

"Ah!" exclaimed the Canadian, whose eyes had never left the ocean, "they are coming nearer; they are in the same water as the *Nautilus*."

Then, returning to the conversation, he said:

"You spoke of the cachalot as a small creature. I have heard of gigantic ones. They are intelligent cetacea. It is said of some that they cover themselves with seaweed and fucus, and then are taken for islands. People encamp upon them, and settle there; light a fire——"

"And build houses," said Conseil.

"Yes, joker," said Ned Land. "And one fine day the creature plunges, carrying with it all the inhabitants to the bottom of the sea."

"Something like the travels of Sinbad the Sailor," I replied, laughing.

"Ah!" suddenly exclaimed Ned Land, "it is not one whale; there are ten—there are twenty—it is a whole troop! And I not able to do anything! hands and feet tied!"

"But, friend Ned," said Conseil, "why do you not ask Captain Nemo's permission to chase them?"

Conseil had not finished his sentence when Ned Land had lowered himself through the panel to seek the Captain. A few minutes afterwards the two appeared together on the platform.

Captain Nemo watched the troop of cetacea playing on the waters about a mile from the *Nautilus*.

"They are southern whales," said he; "there goes the fortune of a whole fleet of whalers."

"Well, sir," asked the Canadian, "can I not chase them, if only to remind me of my old trade of harpooner?"

"And to what purpose?" replied Captain Nemo; "only to destroy! We have nothing to do with the whale-oil on board."

"But, sir," continued the Canadian, "in the Red Sea you allowed us to follow the dugong."

"Then it was to procure fresh meat for my crew. Here it would be killing for killing's sake. I know that is a privilege reserved for man, but I do not approve of such murderous pastime. In destroying the southern whale (like the Greenland whale, an inoffensive creature), your traders do a culpable action, Master Land. They have already depopulated the whole of Baffin's Bay, and are annihilating a class of useful animals. Leave the unfortunate cetacea alone. They have plenty of natural enemies—cachalots, swordfish, and sawfish—without *you* troubling them."

The Captain was right. The barbarous and inconsiderate greed of these fishermen will one day cause the disappearance of the last whale in the ocean. Ned Land whistled "Yankee-doodle" between his teeth, thrust his hands into his pockets, and turned his back upon us. But Captain Nemo watched the troop of cetacea, and, addressing me, said :

"I was right in saying that whales had natural enemies enough, without counting man. These will have plenty to do before long. Do you see, M. Aronnax, about eight miles to leeward, those blackish moving points?"

"Yes, Captain," I replied.

"Those are cachalots—terrible animals, which I have met in troops of two or three hundred. As to *those*, they are cruel, mischievous creatures; they would be right in exterminating them."

The Canadian turned quickly at the last words.

"Well, Captain," said he, "it is still time, in the interest of the whales."

"It is useless to expose one's self, Professor. The *Nautilus* will disperse them. It is armed with a steel spur as good as Master Land's harpoon, I imagine."

The Canadian did not put himself out enough to shrug his shoulders. Attack cetacea with blows of a spur! Who had ever heard of such a thing?

"Wait, M. Aronnax," said Captain Nemo. "We will show you something you have never yet seen. We have no

pity for these ferocious creatures. They are nothing but mouth and teeth."

Mouth and teeth ! No one could better describe the macrocephalous cachalot, which is sometimes more than seventy-five feet long. Its enormous head occupies one-third of its entire body. Better armed than the whale, whose upper jaw is furnished only with whalebone, it is supplied with twenty-five large tusks, about eight inches long, cylindrical and conical at the top, each weighing two pounds. It is in the upper part of this enormous head, in great cavities divided by cartilages, that is to be found from six to eight hundred pounds of that precious oil called spermaceti. The cachalot is a disagreeable creature, more tadpole than fish, according to Fredol's description. It is badly formed, the whole of its left side being (if we may say it), a "failure," and being only able to see with its right eye. But the formidable troop was nearing us. They had seen the whales and were preparing to attack them. One could judge beforehand that the cachalots would be victorious, not only because they were better built for attack than their inoffensive adversaries, but also because they could remain longer under water without coming to the surface. There was only just time to go to the help of the whales. The *Nautilus* went under water. Conseil, Ned Land, and I took our places before the window in the saloon, and Captain Nemo joined the pilot in his cage to work his apparatus as an engine of destruction. Soon I felt the beatings of the screw quicken, and our speed increased. The battle between the cachalots and the whales had already begun when the *Nautilus* arrived. They did not at first show any fear at the sight of this new monster joining in the conflict. But they soon had to guard against its blows. What a battle ! The *Nautilus* was nothing but a formidable harpoon, brandished by the hand of its Captain. It hurled itself against the fleshy mass, passing through from one part to the other, leaving behind it two quivering halves of the animal. It could not feel the formidable blows from their

tails upon its sides, nor the shock which it produced itself, much more. One cachalot killed, it ran at the next, tacked on the spot that it might not miss its prey, going forwards and backwards, answering to its helm, plunging when the cetacean dived into the deep waters, coming up with it when it returned to the surface, striking it front or sideways, cutting or tearing in all directions and at any pace, piercing it with its terrible spur. What carnage ! What a noise on the surface of the waves ! What sharp hissing, and what snorting peculiar to these enraged animals ! In the midst of these waters, generally so peaceful, their tails made perfect billows. For one hour this wholesale massacre continued, from which the cachalots could not escape. Several times ten or twelve united tried to crush the *Nautilus* by their weight. From the window we could see their enormous mouths, studded with tusks, and their formidable eyes. Ned Land could not contain himself ; he threatened and swore at them. We could feel them clinging to our vessel like dogs worrying a wild boar in a copse. But the *Nautilus*, working its screw, carried them here and there, or to the upper levels of the ocean, without caring for their enormous weight, nor the powerful strain on the vessel. At length the mass of cachalots broke up, the waves became quiet, and I felt that we were rising to the surface. The panel opened, and we hurried on to the platform. The sea was covered with mutilated bodies. A formidable explosion could not have divided and torn this fleshy mass with more violence. We were floating amid gigantic bodies, bluish on the back and white underneath, covered with enormous protuberances. Some terrified cachalots were flying towards the horizon. The waves were dyed red for several miles, and the *Nautilus* floated in a sea of blood : Captain Nemo joined us.

“ Well, Master Land ? ” said he.

“ Well, sir,” replied the Canadian, whose enthusiasm had somewhat calmed ; “ it is a terrible spectacle, certainly. But I am not a butcher. I am a hunter, and I call this a butchery.”

"It is a massacre of mischievous creatures," replied the Captain ; "and the *Nautilus* is not a butcher's knife."

"I like my harpoon better," said the Canadian.

"Every one to his own," answered the Captain, looking fixedly at Ned Land.

I feared he would commit some act of violence, which would end in sad consequences. But his anger was turned by the sight of a whale which the *Nautilus* had just come up with. The creature had not quite escaped from the cachalot's teeth. I recognised the southern whale by its flat head, which is entirely black. Anatomically, it is distinguished from the white whale and the North Cape whale by the seven cervical vertebræ, and it has two more ribs than its congeners. The unfortunate cetacean was lying on its side, riddled with holes from the bites, and quite dead. From its mutilated fin still hung a young whale which it could not save from the massacre. Its open mouth let the water flow in and out, murmuring like the waves breaking on the shore. Captain Nemo steered close to the corpse of the creature. Two of his men mounted its side, and I saw, not without surprise, that they were drawing from its breasts all the milk which they contained, that is to say, about two or three tons. The Captain offered me a cup of the milk, which was still warm. I could not help showing my repugnance to the drink ; but he assured me that it was excellent, and not to be distinguished from cow's milk. I tasted it, and was of his opinion. It was a useful reserve to us, for in the shape of salt butter or cheese it would form an agreeable variety from our ordinary food. From that day I noticed with uneasiness that Ned Land's ill-will towards Captain Nemo increased, and I resolved to watch the Canadian's gestures closely.

CHAPTER XIII

THE ICEBERG

The *Nautilus* was steadily pursuing its southerly course, following the fiftieth meridian with considerable speed. Did he wish to reach the pole? I did not think so, for every attempt to reach that point had hitherto failed. Again, the season was far advanced, for in the Antarctic regions the 13th of March corresponds with the 13th of September of northern regions, which begin at the equinoctial season. On the 14th of March I saw floating ice in latitude 55° , merely pale bits of débris from twenty to twenty-five feet long, forming banks over which the sea curled. The *Nautilus* remained on the surface of the ocean. Ned Land, who had fished in the Arctic Seas, was familiar with its icebergs; but Conseil and I admired them for the first time. In the atmosphere towards the southern horizon stretched a white dazzling band. English whalers have given it the name of "ice blink." However thick the clouds may be, it is always visible, and announces the presence of an ice pack or bank. Accordingly, larger blocks soon appeared, whose brilliancy changed with the caprices of the fog. Some of these masses showed green veins, as if long undulating lines had been traced with sulphate of copper; others resembled enormous amethysts with the light shining through them. Some reflected the light of day upon a thousand crystal facets. Others shaded with vivid calcareous reflections resembled a perfect town of marble. The more we neared the south the more these floating islands increased both in number and importance.

At 60° lat. every pass had disappeared. But, seeking carefully, Captain Nemo soon found a narrow opening, through which he boldly slipped, knowing, however, that it would close behind him. Thus, guided by this clever hand, the *Nautilus* passed through all the ice with a precision which quite charmed Conseil; icebergs or mountains, ice-fields

or smooth plains, seeming to have no limits, drift-ice or floating ice-packs, plains broken up, called *palchs* when they are circular, and streams when they are made up of long strips. The temperature was very low ; the thermometer exposed to the air marked 2° or 3° below zero, but we were warmly clad with fur, at the expense of the sea-bear and seal. The interior of the *Nautilus*, warmed regularly by its electric apparatus, defied the most intense cold. Besides, it would only have been necessary to go some yards beneath the waves to find a more bearable temperature. Two months earlier we should have had perpetual daylight in these latitudes ; but already we had had three or four hours of night, and by and by there would be six months of darkness in these circumpolar regions. On the 15th of March we were in the latitude of New Shetland and South Orkney. The Captain told me that formerly numerous tribes of seals inhabited them ; but that English and American whalers, in their rage for destruction, massacred both old and young ; thus, where there was once life and animation, they had left silence and death.

About eight o'clock on the morning of the 16th of March the *Nautilus*, following the fifty-fifth meridian, cut the Antarctic polar circle. Ice surrounded us on all sides, and closed the horizon. But Captain Nemo went from one opening to another, still going higher. I cannot express my astonishment at the beauties of these new regions. The ice took most surprising forms. Here the grouping formed an oriental town, with innumerable mosques and minarets ; there a fallen city thrown to the earth, as it were, by some convulsion of nature. The whole aspect was constantly changed by the oblique rays of the sun, or lost in the greyish fog amidst hurricanes of snow. Detonations and falls were heard on all sides, great overthrows of icebergs, which altered the whole landscape like a diorama. Often seeing no exit, I thought we were definitely prisoners ; but, instinct guiding him at the slightest indication, Captain Nemo would discover a new pass. He was never mistaken when

he saw the thin threads of bluish water trickling along the ice-fields ; and I had no doubt that he had already ventured into the midst of these Antarctic seas before. On the 16th of March, however, the ice-fields absolutely blocked our road. It was not the iceberg itself, as yet, but vast fields cemented by the cold. But this obstacle could not stop Captain Nemo : he hurled himself against it with frightful violence. The *Nautilus* entered the brittle mass like a wedge, and split it with frightful crackings. It was the battering ram of the ancients hurled by infinite strength. The ice, thrown high in the air, fell like hail around us. By its own power of impulsion our apparatus made a canal for itself ; sometimes carried away by its own impetus, it lodged on the ice-field, crushing it with its weight, and sometimes buried beneath it, dividing it by a simple pitching movement, producing large rents in it. Violent gales assailed us at this time, accompanied by thick fogs, through which, from one end of the platform to the other, we could see nothing. The wind blew sharply from all parts of the compass, and the snow lay in such hard heaps that we had to break it with blows of a pickaxe. The temperature was always at 5° below zero ; every outward part of the *Nautilus* was covered with ice. A rigged vessel would have been entangled in the blocked up gorges. A vessel without sails, with electricity for its motive power, and wanting no coal, could alone brave such high latitudes. At length, on the 18th of March, after many useless assaults, the *Nautilus* was positively blocked. It was no longer either streams, packs, or ice-fields, but an interminable and immovable barrier, formed by mountains soldered together.

“ An iceberg ! ” said the Canadian to me.

I knew that to Ned Land, as well as to all other navigators who had preceded us, this was an inevitable obstacle. The sun appearing for an instant at noon, Captain Nemo took an observation as near as possible, which gave our situation at 51° 30' long. and 67° 39' of S. lat. We had advanced one degree more in this Antarctic region. Of the

liquid surface of the sea there was no longer a glimpse. Under the spur of the *Nautilus* lay stretched a vast plain, entangled with confused blocks. Here and there sharp points and slender needles rising to a height of 200 feet ; further on a steep shore, hewn as it were with an axe and clothed with greyish tints ; huge mirrors, reflecting a few rays of sunshine, half drowned in the fog. And over this desolate face of nature a stern silence reigned, scarcely broken by the flapping of the wings of petrels and puffins. Everything was frozen—even the noise. The *Nautilus* was then obliged to stop in its adventurous course amid these fields of ice. In spite of our efforts, in spite of the powerful means employed to break up the ice, the *Nautilus* remained immovable. Generally, when we can proceed no further, we have return still open to us ; but here return was as impossible as advance, for every pass had closed behind us ; and for the few moments when we were stationary, we were likely to be entirely blocked, which did indeed happen about two o'clock in the afternoon, the fresh ice forming around its sides with astonishing rapidity. I was obliged to admit that Captain Nemo was more than imprudent. I was on the platform at that moment. The Captain had been observing our situation for some time past, when he said to me :

“ Well, sir, what do you think of this ? ”

“ I think that we are caught, Captain.”

“ So, M. Aronnax, you really think that the *Nautilus* cannot disengage itself ? ”

“ With difficulty, Captain ; for the season is already too far advanced for you to reckon on the breaking up of the ice.”

“ Ah! sir,” said Captain Nemo, in an ironical tone, “ you will always be the same. You see nothing but difficulties and obstacles. I affirm that not only can the *Nautilus* disengage itself, but also that it can go further still.”

“ Further to the South ? ” I asked, looking at the Captain.

"Yes, sir ; it shall go to the pole."

"To the pole !" I exclaimed, unable to repress a gesture of incredulity.

"Yes," replied the Captain, coldly, "to the Antarctic pole—to that unknown point from whence springs every meridian of the globe. *You* know whether I can do as I please with the *Nautilus* !"

Yes, I knew that. I knew that this man was bold, even to rashness. But to conquer those obstacles which bristled round the South Pole, rendering it more inaccessible than the North, which had not yet been reached by the boldest navigators—was it not a mad enterprise, one which only a maniac would have conceived ? It then came into my head to ask Captain Nemo if he had ever discovered that pole which had never yet been trodden by a human creature ?

"No, sir," he replied ; "but we will discover it together. Where others have failed, *I* will not fail. I have never yet led my *Nautilus* so far into southern seas ; but, I repeat, it shall go further yet."

"I can well believe you, Captain," said I, in a slightly ironical tone. "I believe you ! Let us go ahead ! There are no obstacles for us ! Let us smash this iceberg ! Let us blow it up ; and, if it resists, let us give the *Nautilus* wings to fly over it !"

"Over it, sir !" said Captain Nemo, quietly ; "no, not over it, but *under* it !"

"Under it !" I exclaimed, a sudden idea of the Captain's projects flashing upon my mind. I understood ; the wonderful qualities of the *Nautilus* were going to serve us in this superhuman enterprise.

"I see we are beginning to understand one another, sir," said the Captain, half smiling. "You begin to see the possibility—I should say the success—of this attempt. That which is impossible for an ordinary vessel is easy to the *Nautilus*. If a continent lies before the pole, it must stop before the continent ; but if, on the contrary, the pole is washed by open sea, it will go even to the pole."

"Certainly," said I, carried away by the Captain's reasoning ; "if the surface of the sea is solidified by the ice, the lower depths are free by the Providential law which has placed the maximum of density of the waters of the ocean one degree higher than freezing-point ; and; if I am not mistaken, the portion of this iceberg which is above the water is as one to four to that which is below."

"Very nearly, sir ; for one foot of iceberg above the sea there are three below it. If these ice mountains are not more than 300 feet above the surface, they are not more than 900 beneath. And what are 900 feet to the *Nautilus* ? "

"Nothing, sir."

"It could even seek at greater depths that uniform temperature of sea-water, and there brave with impunity the thirty or forty degrees of surface cold."

"Just so, sir—just so," I replied, getting animated.

"The only difficulty," continued Captain Nemo, "is that of remaining several days without renewing our provision of air."

"Is that all ? The *Nautilus* has vast reservoirs ; we can fill them, and they will supply us with all the oxygen we want."

"Well thought of, M. Aronnax," replied the Captain, smiling. "But, not wishing you to accuse me of rashness, I will first give you all my objections."

"Have you any more to make ? "

"Only one. It is possible, if the sea exists at the South Pole, that it may be covered ; and, consequently, we shall be unable to come to the surface."

"Good, sir ! but do you forget that the *Nautilus* is armed with a powerful spur, and could we not send it diagonally against these fields of ice, which would open at the shock."

"Ah ! sir, you are full of ideas to-day."

"Besides, Captain," I added, enthusiastically, "why should we not find the sea open at the South Pole as well

as at the North? The frozen poles of the earth do not coincide, either in the southern or in the northern regions; and, until it is proved to the contrary, we may suppose either a continent or an ocean free from ice at these two points of the globe."

"I think so too, M. Aronnax," replied Captain Nemo. "I only wish you to observe that, after having made so many objections to my project, you are now crushing me with arguments in its favour!"

The preparations for this audacious attempt now began. The powerful pumps of the *Nautilus* were working air into the reservoirs and storing it at high pressure. About four o'clock, Captain Nemo announced the closing of the panels on the platform. I threw one last look at the massive iceberg which we were going to cross. The weather was clear, the atmosphere pure enough, the cold very great, being 12° below zero; but, the wind having gone down, this temperature was not so unbearable. About ten men mounted the sides of the *Nautilus*, armed with pickaxes to break the ice around the vessel, which was soon free. The operation was quickly performed, for the fresh ice was still very thin. We all went below. The usual reservoirs were filled with the newly-liberated water, and the *Nautilus* soon descended. I had taken my place with Conseil in the saloon; through the open window we could see the lower beds of the Southern Ocean. The thermometer went up, the needle of the compass deviated on the dial. At about 900 feet, as Captain Nemo had foreseen, we were floating beneath the undulating bottom of the iceberg. But the *Nautilus* went lower still—it went to the depth of four hundred fathoms. The temperature of the water at the surface showed twelve degrees, it was now only ten; we had gained two. I need not say the temperature of the *Nautilus* was raised by its heating apparatus to a much higher degree; every manœuvre was accomplished with wonderful precision.

"We shall pass it, if you please, sir," said Conseil.

"I believe we shall," I said, in a tone of firm conviction.

In this open sea, the *Nautilus* had taken its course direct to the pole, without leaving the fifty-second meridian. From $67^{\circ} 30'$ to 90° , twenty-two degrees and a half of latitude remained to travel ; that is, about five hundred leagues. The *Nautilus* kept up a mean speed of twenty-six miles an hour—the speed of an express train. If that was kept up, in forty hours we should reach the pole.

For a part of the night the novelty of the situation kept us at the window. The sea was lit with the electric lantern ; but it was deserted ; fishes did not sojourn in these imprisoned waters ; they only found there a passage to take them from the Antarctic Ocean to the open polar sea. Our pace was rapid ; we could feel it by the quivering of the long steel body. About two in the morning I took some hours' repose, and Conseil did the same. In crossing the waist I did not meet Captain Nemo : I supposed him to be in the pilot's cage. The next morning, the 19th of March, I took my post once more in the saloon. The electric log told me that the speed of the *Nautilus* had been slackened. It was then going towards the surface ; but prudently emptying its reservoirs very slowly. My heart beat fast. Were we going to emerge and regain the open polar atmosphere ? No ! A shock told me that the *Nautilus* had struck the bottom of the iceberg, still very thick, judging from the deadened sound. We had indeed "struck," to use a sea expression, but in an inverse sense, and at a thousand feet deep. This would give three thousand feet of ice above us ; one thousand being above the water-mark. The iceberg was then higher than at its borders—not a very reassuring fact. Several times that day the *Nautilus* tried again, and every time it struck the wall which lay like a ceiling above it. Sometimes it met with but 900 yards, only 200 of which rose above the surface. It was twice the height it was when the *Nautilus* had gone under the waves. I carefully noted the different depths, and thus obtained a submarine profile

of the chain as it was developed under the water. That night no change had taken place in our situation. Still ice between four and five hundred yards in depth ! It was evidently diminishing, but, still, what a thickness between us and the surface of the ocean ! It was then eight. According to the daily custom on board the *Nautilus*, its air should have been renewed four hours ago ; but I did not suffer much, although Captain Nemo had not yet made any demand upon his reserve of oxygen. My sleep was painful that night ; hope and fear besieged me by turns : I rose several times. The groping of the *Nautilus* continued. About three in the morning, I noticed that the lower surface of the iceberg was only about fifty feet deep. One hundred and fifty feet now separated us from the surface of the waters. The iceberg was by degrees becoming an ice-field, the mountain a plain. My eyes never left the manometer. We were still rising diagonally to the surface, which sparkled under the electric rays. The iceberg was stretching both above and beneath into lengthening slopes ; mile after mile it was getting thinner. At length, at six in the morning of that memorable day, the 19th of March, the door of the saloon opened, and Captain Nemo appeared.

“ The sea is open ! ” was all he said.

CHAPTER XIV

THE SOUTH POLE

I rushed on to the platform. Yes ! the open sea, with but a few scattered pieces of ice and moving icebergs—a long stretch of sea ; a world of birds in the air, and myriads of fishes under those waters, which varied from intense blue to olive green, according to the bottom. The thermometer marked 3° C. above zero. It was comparatively spring, shut up as we were behind this iceberg, whose lengthened mass was dimly seen on our northern horizon.

"Are we at the pole?" I asked the Captain, with a beating heart.

"I do not know," he replied. "At noon I will take our bearings."

"But will the sun show himself through this fog?" said I, looking at the leaden sky.

"However little it shows, it will be enough," replied the Captain.

About ten miles south a solitary island rose to a height of one hundred and four yards. We made for it, but carefully, for the sea might be strewn with banks. One hour afterwards we had reached it, two hours later we had made the round of it. It measured four or five miles in circumference. A narrow canal separated it from a considerable stretch of land, perhaps a continent, for we could not see its limits. The existence of this land seemed to give some colour to Maury's theory. The ingenious American has remarked that, between the South Pole and the sixtieth parallel, the sea is covered with floating ice of enormous size, which is never met with in the North Atlantic. From this fact he has drawn the conclusion that the Antarctic Circle encloses considerable continents, as icebergs cannot form in open sea, but only on the coasts. According to these calculations, the mass of ice surrounding the southern pole forms a vast cap, the circumference of which must be, at least, 2,500 miles. But the *Nautilus*, for fear of running aground, had stopped about three cable-lengths from a strand over which reared a superb heap of rocks. The boat was launched; the Captain, two of his men, bearing instruments, Conseil, and myself were in it. It was ten in the morning. I had not seen Ned Land. Doubtless the Canadian did not wish to admit the presence of the South Pole. A few strokes of the oar brought us to the sand, where we ran ashore. Conseil was going to jump on to the land, when I held him back.

"Sir," said I to Captain Nemo, "to you belongs the honour of first setting foot on this land."

"Yes, sir," said the Captain, "and if I do not hesitate to tread this South Pole, it is because, up to this time, no human being has left a trace there."

Saying this, he jumped lightly on to the sand. His heart beat with emotion. He climbed a rock, sloping to a little promontory, and there, with his arms crossed, mute and motionless, and with an eager look, he seemed to take possession of these southern regions. After five minutes passed in this ecstasy, he turned to us.

"When you like, sir."

I landed, followed by Conseil, leaving the two men in the boat. For a long way the soil was composed of a reddish sandy stone, something like crushed brick, scoriæ, streams of lava, and pumice-stones. One could not mistake its volcanic origin. In some parts, slight curls of smoke emitted a sulphurous smell, proving that the internal fires had lost nothing of their expansive powers, though, having climbed a high acclivity, I could see no volcano for a radius of several miles. We know that in those Antarctic countries, James Ross found two craters, the Erebus and Terror, in full activity, on the 167th meridian, latitude $77^{\circ} 32'$. The vegetation of this desolate continent seemed to me much restricted. Some lichens lay upon the black rocks ; some microscopic plants, rudimentary diatomas, a kind of cells placed between two quartz shells ; long purple and scarlet weed, supported on little swimming bladders, which the breaking of the waves brought to the shore. These constituted the meagre flora of this region. The shore was strewn with molluscs, little mussels, and limpets. I also saw myriads of northern clios, one-and-a-quarter inches long, of which a whale would swallow a whole world at a mouthful ; and some perfect sea-butterflies, animating the waters on the skirts of the shore.

There appeared on the high bottoms some coral shrubs, of the kind which, according to James Ross, live in the Antarctic seas to the depth of more than 1,000 yards. Then there were little kingfishers and starfish studding the soil.

But where life abounded most was in the air. There thousands of birds fluttered and flew of all kinds, deafening us with their cries ; others crowded the rock, looking at us as we passed by without fear, and pressing familiarly close by our feet. There were penguins, so agile in the water, heavy and awkward as they are on the ground ; they were uttering harsh cries, a large assembly, sober in gesture, but extravagant in clamour. Albatrosses passed in the air, the expanse of their wings being at least four yards and a half, and justly called the vultures of the ocean ; some gigantic petrels, and some damiers, a kind of small duck, the underpart of whose body is black and white ; then there were a whole series of petrels, some whitish, with brown-bordered wings, others blue, peculiar to the Antarctic seas, and so oily, as I told Conseil, that the inhabitants of the Ferroe Islands had nothing to do before lighting them but to put a wick in.

"A little more," said Conseil, "and they would be perfect lamps ! After that, we cannot expect Nature to have previously furnished them with wicks !"

About half a mile farther on the soil was riddled with ruffs' nests, a sort of laying-ground, out of which many birds were issuing. Captain Nemo had some hundreds hunted. They uttered a cry like the braying of an ass, were about the size of a goose, slate-colour on the body, white beneath, with a yellow line round their throats ; they allowed themselves to be killed with a stone, never trying to escape. But the fog did not lift, and at eleven the sun had not yet shown itself. Its absence made me uneasy. Without it no observations were possible. How, then, could we decide whether we had reached the pole ? When I rejoined Captain Nemo, I found him leaning on a piece of rock, silently watching the sky. He seemed impatient and vexed. But what was to be done ? This rash and powerful man could not command the sun as he did the sea. Noon arrived without the orb of day showing itself for an instant. We could not even tell its position behind the curtain of fog ; and soon the fog turned to snow.

“Till to-morrow,” said the Captain, quietly, and we returned to the *Nautilus* amid these atmospheric disturbances.

The tempest of snow continued till the next day. It was impossible to remain on the platform. From the saloon, where I was taking notes of incidents happening during this excursion to the polar continent, I could hear the cries of petrels and albatrosses sporting in the midst of this violent storm. The *Nautilus* did not remain motionless, but skirted the coast, advancing ten miles more to the south in the half-light left by the sun as it skirted the edge of the horizon. The next day, the 20th of March, the snow had ceased. The cold was a little greater, the thermometer showing 2° below zero. The fog was rising, and I hoped that that day our observations might be taken. Captain Nemo not having yet appeared, the boat took Conseil and myself to land. The soil was still of the same volcanic nature ; everywhere were traces of lava, scoriæ, and basalt ; but the crater which had vomited them I could not see. Here, as lower down, this continent was alive with myriads of birds. But their rule was now divided with large troops of sea-mammals, looking at us with their soft eyes. There were several kinds of seals, some stretched on the earth, some on flakes of ice, many going in and out of the sea. They did not flee at our approach, never having had anything to do with man ; and I reckoned that there were provisions there for hundreds of vessels.

“Sir,” said Conseil, “will you tell me the names of these creatures ?”

“They are seals and morses.”

It was now eight in the morning. Four hours remained to us before the sun could be observed with advantage. I directed our steps towards a vast bay cut in the steep granite shore. There, I can aver that earth and ice were lost to sight by the numbers of sea-mammals covering them, and I involuntarily sought for old Proteus, the mythological shepherd who watched these immense flocks

of Neptune. There were more seals than anything else, forming distinct groups, male and female, the father watching over his family, the mother suckling her little ones, some already strong enough to go a few steps. When they wished to change their place, they took little jumps, made by the contraction of their bodies, and helped awkwardly enough by their imperfect fin, which, as with the lamantin, their cousins, forms a perfect forearm. I should say that, in the water, which is their element—the spine of these creatures is flexible ; with smooth and close skin and webbed feet—they swim admirably. In resting on the earth they take the most graceful attitudes. Thus the ancients, observing their soft and expressive looks, which cannot be surpassed by the most beautiful look a woman can give, their clear voluptuous eyes, their charming positions, and the poetry of their manners, metamorphosed them, the male into a triton and the female into a mermaid. I made Conseil notice the considerable development of the lobes of the brain in these interesting cetaceans. No mammal, except man, has such a quantity of brain matter ; they are also capable of receiving a certain amount of education, are easily domesticated, and I think, with other naturalists, that if properly taught they would be of great service as fishing-dogs. The greater part of them slept on the rocks or on the sand. Amongst these seals, properly so called, which have no external ears (in which they differ from the otter, whose ears are prominent), I noticed several varieties of seals about three yards long, with a white coat, bulldog heads, armed with teeth in both jaws, four incisors at the top and four at the bottom, and two large canine teeth in the shape of a fleur-de-lis. Amongst them glided sea-elephants, a kind of seal, with short, flexible trunks. The giants of this species measured twenty feet round and ten yards and a half in length ; but they did not move as we approached.

“ These creatures are not dangerous ? ” asked Conseil.

“ No ; not unless you attack them. When they have to

defend their young their rage is terrible, and it is not uncommon for them to break the fishing-boats to pieces."

"They are quite right," said Conseil.

"I do not say they are not."

Two miles farther on we were stopped by the promontory which shelters the bay from the southerly winds. Beyond it we heard loud bellowings such as a troop of ruminants would produce.

"Good!" said Conseil; "a concert of bulls!"

"No; a concert of morses."

"They are fighting!"

"They are either fighting or playing."

We now began to climb the blackish rocks, amid unforeseen stumbles, and over stones which the ice made slippery. More than once I rolled over at the expense of my loins. Conseil, more prudent or more steady, did not stumble, and helped me up, saying:

"If, sir, you would have the kindness to take wider steps, you would preserve your equilibrium better."

Arrived at the upper ridge of the promontory, I saw a vast white plain covered with morses. They were playing amongst themselves, and what we heard were bellowings of pleasure, not of anger.

As I passed these curious animals I could examine them leisurely, for they did not move. Their skins were thick and rugged, of a yellowish tint, approaching to red; their hair was short and scant. Some of them were four yards and a quarter long. Quieter and less timid than their cousins of the north, they did not, like them, place sentinels round the outskirts of their encampment. After examining this city of morses, I began to think of returning. It was eleven o'clock, and, if Captain Nemo found the conditions favourable for observations, I wished to be present at the operation. We followed a narrow pathway running along the summit of the steep shore. At half-past eleven we had reached the place where we landed. The boat had run aground, bringing the Captain. I saw him standing on a block of basalt,

his instruments near him, his eyes fixed on the northern horizon, near which the sun was then describing a lengthened curve. I took my place beside him, and waited without speaking. Noon arrived, and, as before, the sun did not appear. It was a fatality. Observations were still wanting. If not accomplished to-morrow, we must give up all idea of taking any. We were indeed exactly at the 20th of March. To-morrow, the 21st, would be the equinox ; the sun would disappear behind the horizon for six months, and with its disappearance the long polar night would begin. Since the September equinox it had emerged from the northern horizon, rising by lengthened spirals up to the 21st of December. At this period, the summer solstice of the northern regions, it had begun to descend ; and to-morrow was to shed its last rays upon them. I communicated my fears and observations to Captain Nemo.

"You are right, M. Aronnax," said he ; "if to-morrow I cannot take the altitude of the sun, I shall not be able to do it for six months. But precisely because chance has led me into these seas on the 21st of March, my bearings will be easy to take, if at twelve we can see the sun."

"Why, Captain ?"

"Because then the orb of day described such lengthened curves that it is difficult to measure exactly its height above the horizon, and grave errors may be made with instruments."

"What will you do then ?"

"I shall only use my chronometer," replied Captain Nemo. "If to-morrow, the 21st of March, the disc of the sun, allowing for refraction, is exactly cut by the northern horizon, it will show that I am at the South Pole."

"Just so," said I. "But this statement is not mathematically correct, because the equinox does not necessarily begin at noon."

"Very likely, sir ; but the error will not be a hundred yards and we do not want more. Till to-morrow, then !"

Captain Nemo returned on board. Conseil and I remained to survey the shore, observing and studying until five o'clock. Then I went to bed, not, however, without invoking, like the Indian, the favour of the radiant orb. The next day, the 21st of March, at five in the morning, I mounted the platform. I found Captain Nemo there.

"The weather is lightening a little," said he. "I have some hope. After breakfast we will go on shore and choose a post for observation."

That point settled, I sought Ned Land. I wanted to take him with me. But the obstinate Canadian refused, and I saw that his taciturnity and his bad humour grew day by day. After all, I was not sorry for his obstinacy under the circumstances. Indeed, there were too many seals on shore, and we ought not to lay such temptation in this unreflecting fisherman's way. Breakfast over, we went on shore. The *Nautilus* had gone some miles further up in the night. It was a whole league from the coast, above which reared a sharp peak about five hundred yards high. The boat took with me Captain Nemo, two men of the crew, and the instruments, which consisted of a chronometer, a telescope, and a barometer. While crossing, I saw numerous whales belonging to the three kinds peculiar to the southern seas; the whale, or the English "right whale," which has no dorsal fin; the "humpback," with reeved chest and large, whitish fins, which, in spite of its name, do not form wings; and the fin-back, of a yellowish brown, the liveliest of all the cetacea. This powerful creature is heard a long way off when he throws to a great height columns of air and vapour, which look like whirlwinds of smoke. These different mammals were disporting themselves in troops in the quiet waters; and I could see that this basin of the Antarctic Pole served as a place of refuge to the cetacea too closely tracked by the hunters. I also noticed large medusæ floating between the reeds.

At nine we landed; the sky was brightening, the clouds were flying to the south, and the fog seemed to be leaving

the cold surface of the waters. Captain Nemo went towards the peak, which he doubtless meant to be his observatory. It was a painful ascent over the sharp lava and the pumice-stones, in an atmosphere often impregnated with a sulphurous smell from the smoking cracks. For a man unaccustomed to walk on land, the Captain climbed the steep slopes with an agility I never saw equalled and which a hunter would have envied. We were two hours getting to the summit of this peak, which was half porphyry and half basalt. From thence we looked upon a vast sea which, towards the north, distinctly traced its boundary line upon the sky. At our feet lay fields of dazzling whiteness. Over our heads a pale azure, free from fog. To the north the disc of the sun seemed like a ball of fire, already horned by the cutting of the horizon. From the bosom of the water rose sheaves of liquid jets by hundreds. In the distance lay the *Nautilus* like a cetacean asleep on the water. Behind us, to the south and east, an immense country and a chaotic heap of rocks and ice, the limits of which were not visible. On arriving at the summit Captain Nemo carefully took the mean height of the barometer, for he would have to consider that in taking his observations. At a quarter to twelve the sun, then seen only by refraction, looked like a golden disc shedding its last rays upon this deserted continent and seas which never man had yet ploughed. Captain Nemo, furnished with a lenticular glass which, by means of a mirror, corrected the refraction, watched the orb sinking below the horizon by degrees, following a lengthened diagonal. I held the chronometer. My heart beat fast. If the disappearance of the half-disc of the sun coincided with twelve o'clock on the chronometer, we were at the pole itself.

“Twelve !” I exclaimed.

“The South Pole !” replied Captain Nemo, in a grave voice, handing me the glass, which showed the orb cut in exactly equal parts by the horizon.

I looked at the last rays crowning the peak, and the

shadows mounting by degrees up its slopes. At that moment Captain Nemo, resting with his hand on my shoulder, said :

"I, Captain Nemo, on this 21st day of March, 1868, have reached the South Pole on the ninetieth degree ; and I take possession of this part of the globe, equal to one-sixth of the known continents."

"In whose name, Captain ?"

"In my own, sir !"

Saying which, Captain Nemo unfurled a black banner, bearing an "N" in gold quartered on its bunting. Then, turning towards the orb of day, whose last rays lapped the horizon of the sea, he exclaimed :

"Adieu, sun ! Disappear, thou radiant orb ! rest beneath this open sea, and let a night of six months spread its shadows over my new domains !"

CHAPTER XV

ACCIDENT OR INCIDENT ?

The next day, the 22nd of March, at six in the morning, preparations for departure were begun. The last gleams of twilight were melting into night. The cold was great, the constellations shone with wonderful intensity. In the zenith glittered that wondrous Southern Cross—the polar bear of Antarctic regions. The thermometer showed 12° below zero, and when the wind freshened it was most biting. Flakes of ice increased on the open water. The sea seemed everywhere alike. Numerous blackish patches spread on the surface, showing the formation of fresh ice. Evidently the southern basin, frozen during the six winter months, was absolutely inaccessible. What became of the whales in that time ? Doubtless they went beneath the icebergs, seeking more practicable seas. As to the seals and morses, accustomed to live in a hard climate, they remained on

these icy shores. These creatures have the instinct to break holes in the ice-field and to keep them open. To these holes they come for breath ; when the birds, driven away by the cold, have emigrated to the north, these sea mammals remain sole masters of the polar continent. But the reservoirs were filling with water, and the *Nautilus* was slowly descending. At 1,000 feet deep it stopped ; its screw beat the waves, and it advanced straight towards the north at a speed of fifteen miles an hour. Towards night it was already floating under the immense body of the iceberg. At three in the morning I was awakened by a violent shock. I sat up in my bed and listened in the darkness, when I was thrown into the middle of the room. The *Nautilus*, after having struck, had rebounded violently. I groped along the partition, and by the staircase to the saloon, which was lit by the luminous ceiling. The furniture was upset. Fortunately the windows were firmly set, and had held fast. The pictures on the starboard side, from being no longer vertical, were clinging to the paper, whilst those of the port side were hanging at least a foot from the wall. The *Nautilus* was lying on its starboard side perfectly motionless. I heard footsteps, and a confusion of voices ; but Captain Nemo did not appear. As I was leaving the saloon, Ned Land and Conseil entered.

“ What is the matter ? ” said I, at once.

“ I came to ask you, sir,” replied Conseil.

“ Confound it ! ” exclaimed the Canadian, “ I know well enough ! The *Nautilus* has struck ; and, judging by the way she lies, I do not think she will right herself as she did the first time in Torres Straits.”

“ But,” I asked, “ has she at least come to the surface of the sea ? ”

“ We do not know,” said Conseil.

“ It is easy to decide,” I answered. I consulted the manometer. To my great surprise, it showed a depth of more than 180 fathoms. “ What does that mean ? ” I exclaimed.

“ We must ask Captain Nemo,” said Conseil.

"But where shall we find him?" said Ned Land.

"Follow me," said I, to my companions.

We left the saloon. There was no one in the library. At the centre staircase, by the berths of the ship's crew, there was no one. I thought that Captain Nemo must be in the pilot's cage. It was best to wait. We all returned to the saloon. For twenty minutes we remained thus, trying to hear the slightest noise which might be made on board the *Nautilus*, when Captain Nemo entered. He seemed not to see us; his face, generally so impassive, showed signs of uneasiness. He watched the compass silently, then the manometer; and, going to the planisphere, placed his finger on a spot representing the southern seas. I would not interrupt him; but, some minutes later, when he turned towards me, I said, using one of his own expressions in the Torres Straits:

"An incident, Captain?"

"No, sir; an accident this time."

"Serious?"

"Perhaps."

"Is the danger immediate?"

"No."

"The *Nautilus* has stranded?"

"Yes."

"And this has happened—how?"

"From a caprice of nature, not from the ignorance of man. Not a mistake has been made in the working. But we cannot prevent equilibrium from producing its effects. We may brave human laws, but we cannot resist natural ones."

Captain Nemo had chosen a strange moment for uttering this philosophical reflection. On the whole, his answer helped me little.

"May I ask, sir, the cause of this accident?"

"An enormous block of ice, a whole mountain, has turned over," he replied. "When icebergs are undermined at their base by warmer water or reiterated shocks their centre of gravity rises, and the whole thing turns over. This

is what has happened ; one of these blocks, as it fell, struck the *Nautilus*, then, gliding under its hull, raised it with irresistible force, bringing it into beds which are not so thick, where it is lying on its side."

"But can we not get the *Nautilus* off by emptying its reservoirs, that it might regain its equilibrium?"

"That, sir, is being done at this moment. You can hear the pump working. Look at the needle of the manometer ; it shows that the *Nautilus* is rising, but the block of ice is floating with it ; and, until some obstacle stops its ascending motion, our position cannot be altered."

Indeed, the *Nautilus* still held the same position to starboard ; doubtless it would right itself when the block stopped. But at this moment who knows if we may not be frightfully crushed between the two glassy surfaces ? I reflected on all the consequences of our position. Captain Nemo never took his eyes off the manometer. Since the fall of the iceberg, the *Nautilus* had risen about a hundred and fifty feet, but it still made the same angle with the perpendicular. Suddenly a slight movement was felt in the hold. Evidently it was righting a little. Things hanging in the saloon were sensibly returning to their normal position. The partitions were nearing the upright. No one spoke. With beating hearts we watched and felt the straightening. The boards became horizontal under our feet. Ten minutes passed.

"At last we have righted !" I exclaimed.

"Yes," said Captain Nemo, going to the door of the saloon.

"But are we floating?" I asked.

"Certainly," he replied ; "since the reservoirs are not empty ; and, when empty, the *Nautilus* must rise to the surface of the sea."

We were in open sea ; but at a distance of about ten yards, on either side of the *Nautilus*, rose a dazzling wall of ice. Above and beneath the same wall. Above, because the lower surface of the iceberg stretched over us like an

immense ceiling. Beneath, because the overturned block, having slid by degrees, had found a resting-place on the lateral walls, which kept it in that position. The *Nautilus* was really imprisoned in a perfect tunnel of ice more than twenty yards in breadth, filled with quiet water. It was easy to get out of it by going either forward or backward, and then make a free passage under the iceberg, some hundreds of yards deeper. The luminous ceiling had been extinguished, but the saloon was still resplendent with intense light. It was the powerful reflection from the glass partition sent violently back to the sheets of the lantern. I cannot describe the effect of the voltaic rays upon the great blocks so capriciously cut ; upon every angle, every ridge, every facet was thrown a different light, according to the nature of the veins running through the ice ; a dazzling mine of gems, particularly of sapphires, their blue rays crossing with the green of the emerald. Here and there were opal shades of wonderful softness, running through bright spots like diamonds of fire, the brilliancy of which the eye could not bear. The power of the lantern seemed increased a hundredfold, like a lamp through the lenticular plates of a first-class lighthouse.

"How beautiful ! how beautiful !" cried Conseil.

"Yes," I said, "it is a wonderful sight. Is it not, Ned ?"

"Yes, confound it ! Yes," answered Ned Land, "it is superb ! I am mad at being obliged to admit it. No one has ever seen anything like it ; but the sight may cost us dear. And, if I must say all, I think we are seeing here things which God never intended man to see."

Ned was right, it was too beautiful. Suddenly a cry from Conseil made me turn.

"What is it ?" I asked.

"Shut your eyes, sir ! Do not look, sir !" Saying which, Conseil clapped his hands over his eyes.

"But what is the matter, my boy ?"

"I am dazzled, blinded."

My eyes turned involuntarily towards the glass, but I could not stand the fire which seemed to devour them. I understood what had happened. The *Nautilus* had put on full speed. All the quiet lustre of the ice-walls was at once changed into flashes of lightning. The fire from these myriads of diamonds was blinding. It required some time to calm our troubled looks. At last the hands were taken down.

"Faith, I should never have believed it," said Conseil.

It was then five in the morning ; and at that moment a shock was felt at the bows of the *Nautilus*. I knew that its spur had struck a block of ice. It must have been a false manœuvre, for this submarine tunnel, obstructed by blocks, was not very easy navigation. I thought that Captain Nemo, by changing his course, would either turn these obstacles or else follow the windings of the tunnel. In any case, the road before us could not be entirely blocked. But, contrary to my expectations, the *Nautilus* took a decided retrograde motion.

"We are going backwards ? " said Conseil.

"Yes," I replied. "This end of the tunnel can have no egress."

"And then ? "

"Then," said I, "the working is easy. We must go back again, and go out at the southern opening. That is all."

In speaking thus, I wished to appear more confident than I really was. But the retrograde motion of the *Nautilus* was increasing ; and, reversing the screw, it carried us at great speed.

"It will be a hindrance," said Ned.

"What does it matter, some hours more or less, provided we get out at last ? "

"Yes," repeated Ned Land, "provided we do get out at last ! "

For a short time I walked from the saloon to the library. My companions were silent. I soon threw myself on an

ottoman, and took a book, which my eyes overran mechanically. A quarter of an hour after, Conseil, approaching me, said, "Is what you are reading very interesting, sir?"

"Very interesting!" I replied.

"I should think so, sir. It is your own book you are reading."

"My book?"

And indeed I was holding in my hand the work on the *Great Submarine Depths*. I did not even dream of it. I closed the book and returned to my walk. Ned and Conseil rose to go.

"Stay here, my friends," said I, detaining them. "Let us remain together until we are out of this block."

"As you please, sir," Conseil replied.

Some hours passed. I often looked at the instruments hanging from the partition. The manometer showed that the *Nautilus* kept at a constant depth of more than three hundred yards; the compass still pointed to south; the log indicated a speed of twenty miles an hour, which, in such a cramped space, was very great. But Captain Nemo knew that he could not hasten too much, and that minutes were worth ages to us. At twenty-five minutes past eight a second shock took place, this time from behind. I turned pale. My companions were close by my side. I seized Conseil's hand. Our looks expressed our feelings better than words. At this moment the Captain entered the saloon. I went up to him.

"Our course is barred southward?" I asked.

"Yes, sir. The iceberg has shifted and closed every outlet."

"We are blocked up then?"

"Yes."

CHAPTER XVI

WANT OF AIR

Thus around the *Nautilus*, above and below, was an impenetrable wall of ice. We were prisoners to the iceberg. I watched the Captain. His countenance had resumed its habitual imperturbability.

"Gentlemen," he said calmly, "there are two ways of dying in the circumstances in which we are placed." (This puzzling person had the air of a mathematical professor lecturing to his pupils.) "The first is to be crushed; the second is to die of suffocation. I do not speak of the possibility of dying of hunger, for the supply of provisions in the *Nautilus* will certainly last longer than we shall. Let us, then, calculate our chances."

"As to suffocation, Captain," I replied, "that is not to be feared, because our reservoirs are full."

"Just so; but they will only yield two days' supply of air. Now, for thirty-six hours we have been hidden under the water, and already the heavy atmosphere of the *Nautilus* requires renewal. In forty-eight hours our reserve will be exhausted."

"Well, Captain, can we be delivered before forty-eight hours?"

"We will attempt it, at least, by piercing the wall that surrounds us."

"On which side?"

"Sound will tell us. I am going to run the *Nautilus* aground on the lower bank, and my men will attack the iceberg on the side that is least thick."

Captain Nemo went out. Soon I discovered by a hissing noise that the water was entering the reservoirs. The *Nautilus* sank slowly, and rested on the ice at a depth of 350 yards, the depth at which the lower bank was immersed.

"My friends," I said, "our situation is serious, but I rely on your courage and energy."

"Sir," replied the Canadian, "I am ready to do anything for the general safety."

"Good ! Ned," and I held out my hand to the Canadian.

"I will add," he continued, "that, being as handy with the pickaxe as with the harpoon, if I can be useful to the Captain, he can command my services."

"He will not refuse your help. Come, Ned !"

I led him to the room where the crew of the *Nautilus* were putting on their cork-jackets. I told the Captain of Ned's proposal, which he accepted. The Canadian put on his sea-costume, and was ready as soon as his companions. When Ned was dressed, I re-entered the drawing-room, where the panes of glass were open, and, posted near Conseil, I examined the ambient beds that supported the *Nautilus*. Some instants after, we saw a dozen of the crew set foot on the bank of ice, and among them Ned Land, easily known by his stature. Captain Nemo was with them. Before proceeding to dig the walls, he took the soundings, to be sure of working in the right direction. Long sounding lines were sunk in the side walls, but after fifteen yards they were again stopped by the thick wall. It was useless to attack it on the ceiling-like surface, since the iceberg itself measured more than 400 yards in height. Captain Nemo then sounded the lower surface. There ten yards of wall separated us from the water, so great was the thickness of the ice-field. It was necessary, therefore, to cut from it a piece equal in extent to the waterline of the *Nautilus*. There were about 6,000 cubic yards to detach, so as to dig a hole by which we could descend to the ice-field. The work had begun immediately and carried on with indefatigable energy. Instead of digging round the *Nautilus* which would have involved greater difficulty, Captain Nemo had an immense trench made at eight yards from the port-quarter. Then the men set to work simultaneously with their screws on several points of its circumference. Presently the pickaxe attacked this compact matter vigorously, and large blocks were detached from the mass.

By a curious effect of specific gravity, these blocks, lighter than water, fled, so to speak, to the vault of the tunnel, that increased in thickness at the top in proportion as it diminished at the base. But that mattered little, so long as the lower part grew thinner. After two hours' hard work, Ned Land came in exhausted. He and his comrades were replaced by new workers, whom Conseil and I joined. The second lieutenant of the *Nautilus* superintended us. The water seemed singularly cold, but I soon got warm handling the pickaxe. My movements were free enough, although they were made under a pressure of thirty atmospheres. When I re-entered, after working two hours, to take some food and rest, I found a perceptible difference between the pure fluid with which the Rouquayrol engine supplied me and the atmosphere of the *Nautilus*, already charged with carbonic acid. The air had not been renewed for forty-eight hours, and its vivifying qualities were considerably enfeebled. However, after a lapse of twelve hours, we had only raised a block of ice one yard thick, on the marked surface, which was about 600 cubic yards ! Reckoning that it took twelve hours to accomplish this much it would take five nights and four days to bring this enterprise to a satisfactory conclusion. Five nights and four days ! And we have only air enough for two days in the reservoirs ! " Without taking into account," said Ned, " that, even if we get out of this infernal prison, we shall also be imprisoned under the iceberg, shut out from all possible communication with the atmosphere." True enough ! Who could then foresee the minimum of time necessary for our deliverance ? We might be suffocated before the *Nautilus* could regain the surface of the waves ? Was it destined to perish in this ice-tomb, with all those it enclosed ? The situation was terrible. But everyone had looked the danger in the face, and each was determined to do his duty to the last.

As I expected, during the night a new block a yard square was carried away, and still further sank the immense

hollow. But in the morning when, dressed in my cork-jacket, I traversed the slushy mass at a temperature of six or seven degrees below zero, I remarked that the side walls were gradually closing in. The beds of water farthest from the trench, that were not warmed by the men's work, showed a tendency to solidification. In presence of this new and imminent danger, what would become of our chances of safety, and how hinder the solidification of this liquid medium, that would burst the partitions of the *Nautilus* like glass?

I did not tell my companions of this new danger. What was the good of damping the energy they displayed in the painful work of escape? But when I went on board again, I told Captain Nemo of this grave complication.

"I know it," he said, in that calm tone which could counteract the most terrible apprehensions. "It is one danger more; but I see no way of escaping it; the only chance of safety is to go quicker than solidification. We must be beforehand with it, that is all."

On this day for several hours I used my pickaxe vigorously. The work kept me up. Besides, to work was to quit the *Nautilus*, and breathe directly the pure air drawn from the reservoirs, and supplied by our apparatus, and to quit the impoverished and vitiated atmosphere. Towards evening the trench was dug one yard deeper. When I returned on board, I was nearly suffocated by the carbonic acid with which the air was filled—ah! if we had only the chemical means to drive away this deleterious gas. We had plenty of oxygen; all this water contained a considerable quantity, and by dissolving it with our powerful piles, it would restore the vivifying fluid. I had thought well over it; but of what good was that, since the carbonic acid produced by our respiration had invaded every part of the vessel? To absorb it, it was necessary to fill some jars with caustic potash, and to shake them incessantly. Now this substance was wanting on board, and nothing could replace it. On that evening, Captain Nemo ought to open

the taps of his reservoirs, and let some pure air into the interior of the *Nautilus* ; without this precaution we could not get rid of the sense of suffocation. The next day, March 26th, I resumed my miner's work in beginning the fifth yard. The side walls and the lower surface of the iceberg thickened visibly. It was evident that they would meet before the *Nautilus* was able to disengage itself. Despair seized me for an instant ; my pickaxe nearly fell from my hands. What was the good of digging if I must be suffocated, crushed by the water that was turning into stone?—a punishment that the ferocity of the savages even would not have invented ! Just then Captain Nemo passed near me. I touched his hand and showed him the walls of our prison. The wall to port had advanced to at least four yards from the hull of the *Nautilus*. The Captain understood me, and signed me to follow him. We went on board. I took off my cork-jacket and accompanied him into the drawing-room.

“ M. Aronnax, we must attempt some desperate means, or we shall be sealed up in this solidified water as in cement.”

“ Yes ; but what is to be done ? ”

“ Ah ! if my *Nautilus* were strong enough to bear this pressure without being crushed ! ”

“ Well ? ” I asked, not catching the Captain's idea.

“ Do you not understand,” he replied, “ that this congelation of water will help us ? Do you not see that by its solidification, it would burst through this field of ice that imprisons us, as, when it freezes, it bursts the hardest stones ? Do you not perceive that it would be an agent of safety instead of destruction ? ”

“ Yes, Captain, perhaps. But, whatever resistance to crushing the *Nautilus* possesses, it could not support this terrible pressure, and would be flattened like an iron plate.”

“ I know it, sir. Therefore we must not reckon on the aid of nature, but on our own exertions. We must stop this

solidification. Not only will the side walls be pressed together ; but there is not ten feet of water before or behind the *Nautilus*. The congelation gains on us on all sides."

"How long will the air in the reservoirs last for us to breathe on board ?"

The Captain looked in my face. "After to-morrow they will be empty !"

A cold sweat came over me. However, ought I to have been astonished at the answer ? On March 22, the *Nautilus* was in the open polar seas. We were at 26°. For five days we had lived on the reserve on board. And what was left of the respirable air must be kept for the workers. Even now, as I write, my recollection is still so vivid that an involuntary terror seizes me and my lungs seem to be without air. Meanwhile, Captain Nemo reflected silently, and evidently an idea had struck him ; but he seemed to reject it. At last, these words escaped his lips :

"Boiling water !" he muttered.

"Boiling water ?" I cried.

"Yes, sir. We are enclosed in a space that is relatively confined. Would not jets of boiling water, constantly injected by the pumps, raise the temperature in this part and stay the congelation ?"

"Let us try it," I said resolutely.

"Let us try it, Professor."

The thermometer then stood at 7° outside. Captain Nemo took me to the galleys, where the vast distillatory machines stood that furnished the drinkable water by evaporation. They filled these with water, and all the electric heat from the piles was thrown through the worms bathed in the liquid. In a few minutes this water reached 100°. It was directed towards the pumps, while fresh water replaced it in proportion. The heat developed by the troughs was such that cold water, drawn up from the sea after only having gone through the machines, came boiling into the body of the pump. The injection was begun, and three hours after the thermometer marked

6° below zero outside. One degree was gained. Two hours later the thermometer only marked 4°.

"We shall succeed," I said to the Captain, after having anxiously watched the result of the operation.

"I think," he answered, "that we shall not be crushed. We have no more suffocation to fear."

During the night the temperature of the water rose to 1° below zero. The injections could not carry it to a higher point. But, as the congelation of the sea-water produces at least 2°, I was at least reassured against the dangers of solidification.

The next day, March 27th, six yards of ice had been cleared, twelve feet only remaining to be cleared away. There was yet forty-eight hours' work. The air could not be renewed in the interior of the *Nautilus*. And this day would make it worse. An intolerable weight oppressed me. Towards three o'clock in the evening this feeling rose to a violent degree. Yawns dislocated my jaws. My lungs panted as they inhaled this burning fluid, which became rarified more and more. A moral torpor took hold of me. I was powerless, almost unconscious. My brave Conseil, though exhibiting the same symptoms and suffering in the same manner, never left me. He took my hand and encouraged me, and I heard him murmur, "Oh ! if I could only not breathe, so as to leave more air for my master !"

Tears came into my eyes on hearing him speak thus. If our situation to all was intolerable in the interior, with what haste and gladness would we put on our cork-jackets to work in our turn ! Pickaxes sounded on the frozen ice-beds. Our arms ached, the skin was torn off our hands. But what were these fatigues, what did the wounds matter ? Vital air came to the lungs ! We breathed ! we breathed !

All this time no one prolonged his voluntary task beyond the prescribed time. His task accomplished, each one handed in turn to his panting companions the apparatus that supplied him with life. Captain Nemo set the example, and submitted first to this severe discipline. When the time

came, he gave up his apparatus to another and returned to the vitiated air on board, calm, unflinching, unmurmuring.

On that day the ordinary work was accomplished with unusual vigour. Only two yards remained to be raised from the surface. Two yards only separated us from the open sea. But the reservoirs were nearly emptied of air. The little that remained ought to be kept for the workers ; not a particle for the *Nautilus*. When I went back on board, I was half suffocated. What a night ! I know not how to describe it. The next day my breathing was oppressed. Dizziness accompanied the pain in my head and made me like a drunken man. My companions showed the same symptoms. Some of the crew had rattling in the throat.

On that day, the sixth of our imprisonment, Captain Nemo, finding the pickaxes work too slowly, resolved to crush the ice-bed that still separated us from the liquid sheet. This man's coolness and energy never forsook him. He subdued his physical pains by moral force.

By his orders the vessel was lightened, that is to say, raised from the ice-bed by a change of specific gravity. When it floated they towed it so as to bring it above the immense trench made on the level of the water-line. Then, filling his reservoirs of water, he descended and shut himself up in the hole.

Just then all the crew came on board, and the double door of communication was shut. The *Nautilus* then rested on the bed of ice, which was not one yard thick, and which the sounding leads had perforated in a thousand places. The taps of the reservoirs were then opened, and a hundred cubic yards of water was let in, increasing the weight of the *Nautilus* to 1,800 tons. We waited, we listened, forgetting our sufferings in hope. Our safety depended on this last chance. Notwithstanding the buzzing in my head, I soon heard the humming sound under the hull of the *Nautilus*. The ice cracked with a singular noise, like tearing paper, and the *Nautilus* sank.

“ We are off ! ” murmured Conseil in my ear.

I could not answer him. I seized his hand, and pressed it convulsively. All at once, carried away by its frightful overcharge, the *Nautilus* sank like a bullet under the waters, that is to say, it fell as if it was in a vacuum. Then all the electric force was put on the pumps, that soon began to let the water out of the reservoirs. After some minutes, our fall was stopped. Soon, too, the manometer indicated an ascending movement. The screw, going at full speed, made the iron hull tremble to its very bolts and drew us towards the north. But if this floating under the iceberg is to last another day before we reach the open sea, I shall be dead first.

Half stretched upon a divan in the library, I was suffocating. My face was purple, my lips blue, my faculties suspended. I neither saw nor heard. All notion of time had gone from my mind. My muscles could not contract. I do not know how many hours passed thus, but I was conscious of the agony that was coming over me. I felt as if I was going to die. Suddenly I came to. Some breaths of air penetrated my lungs. Had we risen to the surface of the waves? Were we free of the iceberg? No! Ned and Conseil, my two brave friends, were sacrificing themselves to save me. Some particles of air still remained at the bottom of one apparatus. Instead of using it, they had kept it for me, and, while they were being suffocated, they gave me life, drop by drop. I wanted to push back the thing; they held my hands, and for some moments I breathed freely. I looked at the clock; it was eleven in the morning. It ought to be the 28th of March. The *Nautilus* went at a frightful pace, forty miles an hour. It literally tore through the water. Where was Captain Nemo? Had he succumbed? Were his companions dead with him? At the moment the manometer indicated that we were not more than twenty feet from the surface. A mere plate of ice separated us from the atmosphere. Could we not break it? Perhaps. In any case, the *Nautilus* was going to attempt it. I felt that it was in an oblique position, lowering the stern, and raising the

bows. The introduction of water had been the means of disturbing its equilibrium. Then, impelled by its powerful screw, it attacked the ice-field from beneath like a formidable battering-ram. It broke it by backing and then rushing forward against the field, which gradually gave way ; and at last, dashing suddenly against it, shot forwards on the ice-field, that crushed beneath its weight. The panel was opened—one might say torn off—and the pure air came in in abundance to all parts of the *Nautilus*.

CHAPTER XVII

FROM CAPE HORN TO THE AMAZON

How I got on to the platform, I have no idea ; perhaps the Canadian had carried me there. But I breathed, I inhaled the vivifying sea-air. My two companions were getting drunk with the fresh particles. The other unhappy men had been so long without food, that they could not with impunity indulge in the simplest aliments that were given them. We, on the contrary, had no end to restrain ourselves ; we could draw this air freely into our lungs, and it was the breeze, the breeze alone, that filled us with this keen enjoyment.

“ Ah ! ” said Conseil, “ how delightful this oxygen is ! Master need not fear to breathe it. There is enough for everybody.”

Ned Land did not speak, but he opened his jaws wide enough to frighten a shark. Our strength soon returned, and, when I looked round me, I saw we were alone on the platform. The foreign seamen in the *Nautilus* were contented with the air that circulated in the interior ; none of them had come to drink in the open air.

The first words I spoke were words of gratitude and thankfulness to my two companions. Ned and Conseil had prolonged my life during the last hours of this long agony. All my gratitude could not repay such devotion.

"My friends," said I, "we are bound one to the other for ever, and I am under infinite obligations to you."

"Which I shall take advantage of," exclaimed the Canadian.

"What do you mean?" said Conseil.

"I mean that I shall take you with me when I leave this infernal *Nautilus*."

"Well," said Conseil, "after all this, are we going right?"

"Yes," I replied, "for we are going the way of the sun, and here the sun is in the north."

"No doubt," said Ned Land; "but it remains to be seen whether he will bring the ship into the Pacific or the Atlantic Ocean, that is, into frequented or deserted seas."

I could not answer that question, and I feared that Captain Nemo would rather take us to the vast ocean that touches the coasts of Asia and America at the same time. He would thus complete the tour round the submarine world, and return to those waters in which the *Nautilus* could sail freely. We ought, before long, to settle this important point. The *Nautilus* went at a rapid pace. The polar circle was soon passed, and the course shaped for Cape Horn. We were off the American point, March 31st, at seven o'clock in the evening. Then all our past sufferings were forgotten. The remembrance of that imprisonment in the ice was effaced from our minds. We only thought of the future. Captain Nemo did not appear again either in the drawing-room or on the platform. The point shown each day on the planisphere, and, marked by the lieutenant, showed me the exact direction of the *Nautilus*. Now, on that evening, it was evident, to my great satisfaction, that we were going back to the North by the Atlantic. The next day, April 1st, when the *Nautilus* ascended to the surface some minutes before noon, we sighted land to the west. It was Terra del Fuego, which the first navigators named thus from seeing the quantity of smoke that rose from the natives' huts. The coast seemed low to me, but

in the distance rose high mountains. I even thought I had a glimpse of Mount Sarmiento, that rises 2,070 yards above the level of the sea, with a very pointed summit, which, according as it is misty or clear, is a sign of fine or of wet weather. At this moment the peak was clearly defined against the sky. The *Nautilus*, diving again under the water, approached the coast, which was only some few miles off. From the glass windows in the drawing-room, I saw long seaweeds and gigantic fuci and varech, of which the open polar sea contains so many specimens, with their sharp polished filaments ; they measured about 300 yards in length—real cables, thicker than one's thumb ; and, having great tenacity, they are often used as ropes for vessels. Another weed known as velp, with leaves four feet long, buried in the coral concretions, hung at the bottom. It served as nest and food for myriads of crustacea and molluscs, crabs, and cuttlefish. There seals and otters had splendid repasts, eating the flesh of fish with sea-vegetables, according to the English fashion. Over this fertile and luxuriant ground the *Nautilus* passed with great rapidity. Towards evening it approached the Falkland group, the rough summits of which I recognised the following day. The depth of the sea was moderate. On the shores our nets brought in beautiful specimens of seaweed, and particularly a certain fucus, the roots of which were filled with the best mussels in the world. Geese and ducks fell by dozens on the platform, and soon took their places in the pantry on board.

When the last heights of the Falklands had disappeared from the horizon, the *Nautilus* sank to between twenty and twenty-five yards, and followed the American coast. Captain Nemo did not show himself. Until the 3rd of April we did not quit the shores of Patagonia, sometimes under the ocean, sometimes at the surface. The *Nautilus* passed beyond the large estuary formed by the Uruguay. Its direction was northwards, and followed the long windings of the coast of South America. We had then made 1,600 miles since our

embarkation in the seas of Japan. About eleven o'clock in the morning the Tropic of Capricorn was crossed on the thirty-seventh meridian, and we passed Cape Frio standing out to sea. Captain Nemo, to Ned Land's great displeasure, did not like the neighbourhood of the inhabited coasts of Brazil, for we went at a giddy speed. Not a fish, not a bird of the swiftest kind could follow us, and the natural curiosities of these seas escaped all observation.

This speed was kept up for several days, and in the evening of the 9th of April we sighted the most westerly point of South America that forms Cape San Roque. But then the *Nautilus* swerved again, and sought the lowest depth of a submarine valley which is between this Cape and Sierra Leone on the African coast. This valley bifurcates to the parallel of the Antilles, and terminates at the mouth by the enormous depression of 9,000 yards. In this place, the geological basin of the ocean forms, as far as the Lesser Antilles, a cliff to three and a half miles perpendicular in height, and, at the parallel of the Cape Verde Islands, another wall not less considerable, that encloses thus all the sunk continent of the Atlantic. The bottom of this immense valley is dotted with some mountains, that give to these submarine places a picturesque aspect. I speak, moreover, from the manuscript charts that were in the library of the *Nautilus*—charts evidently due to Captain Nemo's hand, and made after his personal observations. For two days the desert and deep waters were visited by means of the inclined planes. The *Nautilus* was furnished with long diagonal broadsides which carried it to all elevations. But on the 11th of April it rose suddenly, and land appeared at the mouth of the Amazon River, a vast estuary, the embouchure of which is so considerable that it freshens the sea-water for the distance of several leagues.

CHAPTER XVIII

THE POULPS

For several days the *Nautilus* kept off from the American coast. Evidently it did not wish to risk the tides of the Gulf of Mexico or of the sea of the Antilles. April 16th, we sighted Martinique and Guadaloupe from a distance of about thirty miles. I saw their tall peaks for an instant. The Canadian, who counted on carrying out his projects in the Gulf, by either landing or hailing one of the numerous boats that coast from one island to another, was quite disheartened. Flight would have been quite practicable, if Ned Land had been able to take possession of the boat without the Captain's knowledge. But in the open sea it could not be thought of. The Canadian, Conseil, and I had a long conversation on this subject. For six months we had been prisoners on board the *Nautilus*. We had travelled 17,000 leagues ; and, as Ned Land said, there was no reason why it should come to an end. We could hope nothing from the Captain of the *Nautilus*, but only from ourselves. Besides, for some time past he had become graver, more retired, less sociable. He seemed to shun me. I met him rarely. Formerly he was pleased to explain the submarine marvels to me ; now he left me to my studies, and came no more to the saloon. What change had come over him ? For what cause ? For my part, I did not wish to bury with me my curious and novel studies. I had now the power to write the true book of the sea ; and this book, sooner or later, I wished to see daylight. The land nearest us was the archipelago of the Bahamas. There rose high submarine cliffs covered with large weeds. It was about eleven o'clock when Ned Land drew my attention to a formidable pricking, like the sting of an ant, which was produced by means of large seaweeds.

"Well," I said, "these are proper caverns for poulps, and I should not be astonished to see some of these monsters.

"What!" said Conseil; "cuttle-fish, real cuttle-fish of the cephalopod class?"

"No," I said, "poulps of huge dimensions."

"I will never believe that such animals exist," said Ned.

"Well," said Conseil, with the most serious air in the world, "I remember perfectly to have seen a large vessel drawn under the waves by an octopus's arm."

"You saw that?" said the Canadian.

"Yes, Ned."

"With your own eyes?"

"With my own eyes."

"Where, pray, might that be?"

"At St. Malo," answered Conseil.

"In the port?" said Ned, ironically.

"No; in a church," replied Conseil.

"In a church!" cried the Canadian.

"Yes; friend Ned. In a picture representing the poulp in question."

"Good!" said Ned Land, bursting out laughing.

"He is quite right," I said. "I have heard of this picture; but the subject represented is taken from a legend, and you know what to think of legends in the matter of natural history. Besides, when it is a question of monsters, the imagination is apt to run wild. Not only is it supposed that these poulps can draw down vessels, but a certain Olaüs Magnus speaks of an octopus a mile long that is more like an island than an animal. It is also said that the Bishop of Nidros was building an altar on an immense rock. Mass finished, the rock began to walk, and returned to the sea. The rock was a poulp. Another Bishop, Pontoppidan, speaks also of a poulp on which a regiment of cavalry could manœuvre. Lastly, the ancient naturalists speak of monsters whose mouths were like gulfs, and which were too large to pass through the Straits of Gibraltar."

"But how much is true of these stories?" asked Conseil.

"Nothing, my friends; at least of that which passes the limit of truth to get to fable or legend. Nevertheless, there

must be some ground for the imagination of the story-tellers. One cannot deny that poulps and cuttle-fish exist of a large species, inferior, however, to the cetaceans. Aristotle has stated the dimensions of a cuttle-fish as five cubits, or nine feet two inches. Our fishermen frequently see some that are more than four feet long. Some skeletons of poulps are preserved in the museums of Trieste and Montpellier, that measure two yards in length. Besides, according to the calculations of some naturalists, one of these animals only six feet long would have tentacles twenty-seven feet long. That would suffice to make a formidable monster."

"Do they fish for them in these days?" asked Ned.

"If they do not fish for them, sailors see them at least. One of my friends, Captain Paul Bos of Havre, has often affirmed that he met one of these monsters of colossal dimensions in the Indian seas. But the most astonishing fact, and which does not permit of the denial of the existence of these gigantic animals, happened some years ago, in 1861."

"What is the fact?" asked Ned Land.

"This is it. In 1861, to the north-east of Teneriffe, very nearly in the same latitude we are in now, the crew of the despatch-boat *Alector* perceived a monstrous cuttle-fish swimming in the waters. Captain Bouguer went near to the animal, and attacked it with harpoon and guns, without much success, for balls and harpoons glided over the soft flesh. After several fruitless attempts the crew tried to pass a slip-knot round the body of the mollusc. The noose slipped as far as the tail fins and there stopped. They tried then to haul it on board, but its weight was so considerable that the tightness of the cord separated the tail from the body, and, deprived of this ornament, he disappeared under the water."

"Indeed! is that a fact?"

"An indisputable fact, my good Ned. They proposed to name this poulp 'Bouguer's cuttle-fish.'"

"What length was it?" asked the Canadian.

"Did it not measure about six yards?" said Conseil, who, posted at the window, was examining again the irregular windings of the cliff.

"Precisely," I replied.

"Its head," rejoined Conseil, "was it not crowned with eight tentacles, that beat the water like a nest of serpents?"

"Precisely."

"Had not its eyes, placed at the back of its head, considerable development?"

"Yes, Conseil."

"And was not its mouth like a parrot's beak?"

"Exactly, Conseil."

"Very well! no offence to master," he replied, quietly; "if this is not Bouguer's cuttle-fish, it is, at least, one of its brothers."

I looked at Conseil. Ned Land hurried to the window.

"What a horrible beast!" he cried.

I looked in my turn, and could not repress a gesture of disgust. Before my eyes was a horrible monster worthy to figure in the legends of the marvellous. It was an immense cuttle-fish, being eight yards long. It swam crossways in the direction of the *Nautilus* with great speed, watching us with its enormous staring green eyes. Its eight arms, or rather feet, fixed to its head, that have given the name of cephalopod to these animals, were twice as long as its body, and were twisted like the furies' hair. One could see the 250 air-holes on the inner side of the tentacles. The monster's mouth, a horned beak like a parrot's, opened and shut vertically. Its tongue, a horned substance, furnished with several rows of pointed teeth, came out quivering from this veritable pair of shears. What a freak of nature, a bird's beak on a mollusc! Its spindle-like body formed a fleshy mass that might weigh 4,000 to 5,000 lb.; the varying colour changing with great rapidity, according to the irritation of the animal, passed successively from livid grey to reddish brown. What irritated this mollusc? No doubt

the presence of the *Nautilus*, more formidable than itself, and on which its suckers or its jaws had no hold. Yet, what monsters these poulps are ! what vitality the Creator has given them ! what vigour in their movements ! and they possess three hearts ! Chance had brought us in presence of this cuttle-fish, and I did not wish to lose the opportunity of carefully studying this specimen of cephalopods. I overcame the horror that inspired me, and, taking a pencil, began to draw it.

"Perhaps this is the same which the *Alector* saw," said Conseil.

"No," replied the Canadian ; "for this is whole, and the other had lost its tail."

"That is no reason," I replied. "The arms and tails of these animals are re-formed by renewal ; and in seven years the tail of Bouguer's cuttlefish has no doubt had time to grow."

By this time other poulps appeared at the port light. I counted seven. They formed a procession after the *Nautilus*, and I heard their beaks gnashing against the iron hull. I continued my work. These monsters kept in the water with such precision that they seemed immovable. Suddenly the *Nautilus* stopped. A shock made it tremble in every plate.

"Have we struck anything ?" I asked.

"In any case," replied the Canadian, "we shall be free, for we are floating."

The *Nautilus* was floating, no doubt, but it did not move. A minute passed. Captain Nemo, followed by his lieutenant, entered the drawing-room. I had not seen him for some time. He seemed dull. Without noticing or speaking to us, he went to the panel, looked at the poulps, and said something to his lieutenant. The latter went out. Soon the panels were shut. The ceiling was lighted. I went towards the Captain.

"A curious collection of poulps ?" I said.

"Yes, indeed, Mr. Naturalist," he replied ; "and we are going to fight them, man to beast."

I looked at him. I thought I had not heard aright.

"Man to beast?" I repeated.

"Yes, sir. The screw is stopped. I think that the horny jaws of one of the cuttle-fish is entangled in the blades. That is what prevents our moving."

"What are you going to do?"

"Rise to the surface, and slaughter this vermin."

"A difficult enterprise."

"Yes, indeed. The electric bullets are powerless against the soft flesh, where they do not find resistance enough to go off. But we shall attack them with the hatchet."

"And the harpoon, sir," said the Canadian, "if you do not refuse my help."

"I will accept it, Master Land."

"We will follow you," I said, and, following Captain Nemo, we went towards the central staircase.

There, about ten men with boarding-hatchets were ready for the attack. Conseil and I took two hatchets; Ned Land seized a harpoon. The *Nautilus* had then risen to the surface. One of the sailors, posted on the top ladder-step, unscrewed the bolts of the panels. But hardly were the screws loosed, when the panel rose with great violence, evidently drawn by the suckers of a poulp's arm. Immediately one of these arms slid like a serpent down the opening and twenty others were above. With one blow of the axe, Captain Nemo cut this formidable tentacle, that slid wriggling down the ladder. Just as we were pressing one on the other to reach the platform, two other arms, lashing the air, came down on the seaman placed before Captain Nemo, and lifted him up with irresistible power. Captain Nemo uttered a cry, and rushed out. We hurried after him.

What a scene! The unhappy man, seized by the tentacle and fixed to the suckers, was balanced in the air at the caprice of this enormous trunk. He rattled in his throat, he was stifled, he cried, "Help! help!" These words, *spoken in French*, startled me! I had a fellow-countryman on board, perhaps several! That heart-rending cry! I shall hear it

all my life. The unfortunate man was lost. Who could rescue him from that powerful pressure ? However, Captain Nemo had rushed to the poulp, and with one blow of the axe had cut through one arm. His lieutenant struggled furiously against other monsters that crept on the flanks of the *Nautilus*. The crew fought with their axes. The Canadian, Conseil, and I buried our weapons in the fleshy masses ; a strong smell of musk penetrated the atmosphere. It was horrible !

For one instant, I thought the unhappy man, entangled with the poulp, would be torn from its powerful suction. Seven of the eight arms had been cut off. One only wriggled in the air, brandishing the victim like a feather. But just as Captain Nemo and his lieutenant threw themselves on it, the animal ejected a stream of black liquid. We were blinded with it. When the cloud dispersed, the cuttle-fish had disappeared, and my unfortunate countryman with it. Ten or twelve poulps now invaded the platform and sides of the *Nautilus*. We rolled pell-mell into the midst of this nest of serpents, that wriggled on the platform in the waves of blood and ink. It seemed as though these slimy tentacles sprang up like the hydra's heads. Ned Land's harpoon, at each stroke, was plunged into the staring eyes of the cuttle-fish. But my bold companion was suddenly overturned by the tenacles of a monster he had not been able to avoid.

Ah ! how my heart beat with emotion and horror ! The formidable beak of a cuttle-fish was open over Ned Land. The unhappy man would be cut in two. I rushed to his succour. But Captain Nemo was before me ; his axe disappeared between the two enormous jaws, and, miraculously saved, the Canadian, rising, plunged his harpoon deep into the triple heart of the poulp.

" I owed myself this revenge ! " said the Captain to the Canadian.

Ned bowed without replying. The combat had lasted a quarter of an hour. The monsters, vanquished and mutilated, left us at last, and disappeared under the waves.

Captain Nemo, covered with blood, nearly exhausted, gazed upon the sea that had swallowed up one of his companions, and great tears gathered in his eyes.

CHAPTER XIX

THE GULF STREAM

THIS terrible scene of the 20th of April none of us can ever forget. I have written it under the influence of violent emotion. Since then I have revised the recital ; I have read it to Conseil and to the Canadian. They found it exact as to facts, but insufficient as to effect. To paint such pictures, one must have the pen of the most illustrious of our poets, the author of *The Toilers of the Deep*.

I have said that Captain Nemo wept while watching the waves ; his grief was great. It was the second companion he had lost since our arrival on board, and what a death ! That friend, crushed, stifled, bruised by the dreadful arms of a poulp, pounded by his iron jaws, would not rest with his comrades in the peaceful coral cemetery ! In the midst of the struggle, it was the despairing cry uttered by the unfortunate man that had torn my heart. The poor Frenchman, forgetting his conventional language, had taken to his own mother tongue, to utter a last appeal ! Amongst the crew of the *Nautilus*, associated with the body and soul of the Captain, recoiling like him from all contact with men, I had a fellow-countryman. Did he alone represent France in this mysterious association, evidently composed of individuals of divers nationalities ? It was one of these insoluble problems that rose up unceasingly before my mind !

Captain Nemo entered his room, and I saw him no more for some time. But that he was sad and irresolute I could see by the vessel, of which he was the soul, and which received all his impressions. The *Nautilus* did not keep on in its settled course ; it floated about like a corpse at the will of the waves. It went at random. He could not tear

himself away from the scene of the last struggle, from this sea that had devoured one of his men. Ten days passed thus. It was not till the 1st of May that the *Nautilus* resumed its northerly course, after having sighted the Bahamas at the mouth of the Bahama Canal. We were then following the current from the largest river to the sea, that has its banks, its fish, and its proper temperatures. I mean the Gulf Stream. It is really a river, that flows freely to the middle of the Atlantic, and whose waters do not mix with the ocean waters. It is a salt river, salter than the surrounding sea. Its mean depth is 1,500 fathoms, its mean breadth ten miles. In certain places the current flows with the speed of two miles and a half an hour. The body of its waters is more considerable than that of all the rivers in the globe. It was on this ocean river that the *Nautilus* then sailed.

I must add that, during the night, the phosphorescent waters of the Gulf Stream rivalled the electric power of our watch-light, especially in the stormy weather that threatened us so frequently. May 8th, we were still crossing Cape Hatteras, at the height of the North Caroline. The width of the Gulf Stream there is seventy-five miles, and its depth 210 yards. The *Nautilus* still went at random ; all supervision seemed abandoned. I thought that, under these circumstances, escape would be possible. Indeed, the inhabited shores offered anywhere an easy refuge. The sea was incessantly ploughed by the steamers that ply between New York or Boston and the Gulf of Mexico, and overrun day and night by the little schooners coasting about the several parts of the American coast. We could hope to be picked up. It was a favourable opportunity, notwithstanding the thirty miles that separated the *Nautilus* from the coasts of the Union. One unfortunate circumstance thwarted the Canadian's plans. The weather was very bad. We were nearing those shores where tempests are so frequent, that country of waterspouts and cyclones actually engendered by the current of the Gulf Stream. To tempt the sea in a frail boat was certain destruction. Ned Land

owned this himself. He fretted, seized with nostalgia that flight only could cure.

"Master," he said that day to me, "this must come to an end. I must make a clean breast of it. This Nemo is leaving land and going up to the north. But I declare to you that I have had enough of the South Pole, and I will not follow him to the North."

"What is to be done, Ned, since flight is impracticable just now?"

"We must speak to the Captain," said he; "you said nothing when we were in your native seas. I will speak, now we are in mine. When I think that before long the *Nautilus* will be by Nova Scotia, and that there near Newfoundland is a large bay, and into that bay the St. Lawrence empties itself, and that the St. Lawrence is my river, the river by Quebec, my native town—when I think of this, I feel furious, it makes my hair stand on end. Sir, I would rather throw myself into the sea! I will not stay here! I am stifled!"

The Canadian was evidently losing all patience. His vigorous nature could not stand this prolonged imprisonment. His face altered daily; his temper became more surly. I knew what he must suffer, for I was seized with home-sickness myself. Nearly seven months had passed without our having had any news from land; Captain Nemo's isolation, his altered spirits, especially since the fight with the poulps, his taciturnity, all made me view things in a different light.

"Well, sir?" said Ned, seeing I did not reply.

"Well, Ned, do you wish me to ask Captain Nemo his intentions concerning us?"

"Yes, sir."

"Although he has already made them known?"

"Yes; I wish it settled finally. Speak for me, in my name only, if you like."

"But I so seldom meet him. He avoids me."

"That is all the more reason for you to go to see him."

I went to my room. From thence I meant to go to Captain Nemo's. It would not do to let this opportunity of meeting him slip. I knocked at the door. No answer. I knocked again, then turned the handle. The door opened, I went in. The Captain was there. Bending over his work-table, he had not heard me. Resolved not to go without having spoken, I approached him. He raised his head quickly, frowned, and said roughly, "You here ! What do you want ?"

"To speak to you, Captain."

"But I am busy, sir ; I am working. I leave you at liberty to shut yourself up ; cannot I be allowed the same ?"

This reception was not encouraging ; but I was determined to hear and answer everything.

"Sir," I said coldly, "I have to speak to you on a matter that admits of no delay."

"What is that, sir ?" he replied, ironically. "Have you discovered something that has escaped me, or has the sea delivered up any new secrets ?"

We were at cross-purposes. But, before I could reply, he showed me an open manuscript on his table, and said, in a more serious tone, "Here, M. Aronnax, is a manuscript written in several languages. It contains the sum of my studies of the sea ; and, if it please God, it shall not perish with me. This manuscript, signed with my name, complete with the history of my life, will be shut up in a little floating case. The last survivor of all of us on board the *Nautilus* will throw this case into the sea, and it will go whither it is borne by the waves."

This man's name ! his history written by himself ! His mystery would then be revealed some day.

"Captain," I said, "I can but approve of the idea that makes you act thus. The result of your studies must not be lost. But the means you employ seem to me to be primitive. Who knows where the winds will carry this case, and in whose hands it will fall ? Could you not use some other means ? Could not you, or one of yours——"

"Never, sir !" he said, hastily interrupting me.

"But I and my companions are ready to keep this manuscript in store ; and, if you will put us at liberty——"

"At liberty ?" said the Captain, rising.

"Yes, sir ; that is the subject on which I wish to question you. For seven months we have been here on board, and I ask you to-day, in the name of my companions and in my own, if your intention is to keep us here always ?"

"M. Aronnax, I will answer you to-day as I did seven months ago : Whoever enters the *Nautilus* must never quit it."

"You impose actual slavery upon us !"

"Give it what name you please."

"But everywhere the slave has the right to regain his liberty."

"Who denies you this right ? Have I ever tried to chain you with an oath ?"

He looked at me with his arms crossed.

"Sir," I said, "to return a second time to this subject will be neither to your nor to my taste ; but, as we have entered upon it, let us go through with it. I repeat, it is not only myself whom it concerns. Study is to me a relief, a diversion, a passion that could make me forget everything. Like you, I am willing to live obscure, in the frail hope of bequeathing one day, to future time, the result of my labours. But it is otherwise with Ned Land. Every man, worthy of the name, deserves some consideration. Have you thought that love of liberty, hatred of slavery, can give rise to schemes of revenge in a nature like the Canadian's ; that he could think, attempt, and try——"

I was silenced ; Captain Nemo rose.

"Whatever Ned Land thinks of, attempts, or tries, what does it matter to me ? I did not seek him ! It is not for my pleasure that I keep him on board ! As for you, M. Aronnax, you are one of those who can understand everything, even silence. I have nothing more to say to you. Let this first time you have come to treat of this subject be the last, for a second time I will not listen to you."

I retired. Our situation was critical. I related my conversation to my two companions.

"We know now," said Ned, "that we can expect nothing from this man. The *Nautilus* is nearing Long Island. We will escape, whatever the weather may be."

But the sky became more and more threatening. Symptoms of a hurricane became manifest. The atmosphere was becoming white and misty. On the horizon fine streaks of cirrhous clouds were succeeded by masses of cumuli. Other low clouds passed swiftly by. The swollen sea rose in huge billows. The birds disappeared with the exception of the petrels, those friends of the storm. The barometer fell sensibly, and indicated an extreme extension of the vapours. The mixture of the storm glass was decomposed under the influence of the electricity that pervaded the atmosphere. The tempest burst on the 18th of May, just as the *Nautilus* was floating off Long Island, some miles from the port of New York. I can describe this strife of the elements ! for, instead of fleeing to the depths of the sea, Captain Nemo, by an unaccountable caprice, would brave it at the surface. The wind blew from the south-west at first. Captain Nemo, during the squalls, had taken his place on the platform. He had made himself fast, to prevent being washed overboard by the monstrous waves. I had hoisted myself up, and made myself fast also, dividing my admiration between the tempest and this extraordinary man who was coping with it. The raging sea was swept by huge cloud-drifts, which were actually saturated with the waves. The *Nautilus*, sometimes lying on its side, sometimes standing up like a mast, rolled and pitched terribly. About five o'clock a torrent of rain fell, that lulled neither sea nor wind. The hurricane blew nearly forty leagues an hour. It is under these conditions that it overturns houses, breaks iron gates, displaces twenty-four pounders. However, the *Nautilus*, in the midst of the tempest, confirmed the words of a clever engineer, "There is no well-constructed hull that cannot defy the sea." This was not a resisting rock ; it was a steel

spindle, obedient and movable, without rigging or masts, that braved its fury with impunity. However, I watched these raging waves attentively. They measured fifteen feet in height, and 150 to 175 yards long, and their speed of propagation was thirty feet per second. Their bulk and power increased with the depth of the water. Such waves as these, at the Hebrides, have displaced a mass weighing 8,400 lb. They are they which, in the tempest of December 23rd, 1864, after destroying the town of Yeddo, in Japan, broke the same day on the shores of America. The intensity of the tempest increased with the night. The barometer, as in 1860 at Reunion during a cyclone, fell seven-tenths at the close of day. I saw a large vessel pass the horizon struggling painfully. She was trying to lie to under half steam, to keep up above the waves. It was probably one of the steamers of the line from New York to Liverpool, or Havre. It soon disappeared in the gloom. At ten o'clock in the evening the sky was on fire. The atmosphere was streaked with vivid lightning. I could not bear the brightness of it ; while the captain, looking at it, seemed to envy the spirit of the tempest. A terrible noise filled the air, a complex noise, made up of the howls of the crushed waves, the roaring of the wind, and the claps of thunder. The wind veered suddenly to all points of the horizon ; and the cyclone, rising in the east, returned after passing by the north, west, and south, in the inverse course pursued by the circular storm of the southern hemisphere. Ah, that Gulf Stream ! It deserves its name of the King of Tempests. It is that which causes those formidable cyclones, by the difference of temperature between its air and its currents. A shower of fire had succeeded the rain. The drops of water were changed to sharp spikes. One would have thought that Captain Nemo was courting a death worthy of himself, a death by lightning. As the *Nautilus*, pitching dreadfully, raised its steel spur in the air, it seemed to act as a conductor, and I saw long sparks burst from it. Crushed and without strength I crawled to the panel, opened it, and descended

to the saloon. The storm was then at its height. It was impossible to stand upright in the interior of the *Nautilus*. Captain Nemo came down about twelve. I heard the reservoirs filling by degrees, and the *Nautilus* sank slowly beneath the waves. Through the open windows in the saloon I saw large fish terrified, passing like phantoms in the water. Some were struck before my eyes. The *Nautilus* was still descending. I thought that at about eight fathoms deep we should find a calm. But no ! the upper beds were too violently agitated for that. We had to seek repose at more than twenty-five fathoms in the bowels of the deep. But there, what quiet, what silence, what peace ! Who could have told that such a hurricane had been let loose on the surface of that ocean ?

CHAPTER XX

FROM LATITUDE $47^{\circ} 24'$ TO LONGITUDE $17^{\circ} 28'$

IN consequence of the storm, we had been thrown eastward once more. All hope of escape on the shores of New York or St. Lawrence had faded away ; and poor Ned, in despair, had isolated himself like Captain Nemo. Conseil and I, however, never left each other. I said that the *Nautilus* had gone aside to the east. I should have said (to be more exact) the north-east. For some days, it wandered first on the surface, and then beneath it, amid those fogs so dreaded by sailors. What accidents are due to these thick fogs ! What shocks upon these reefs when the wind drowns the breaking of the waves ! What collisions between vessels, in spite of their warning lights, whistles, and alarm bells ! And the bottoms of these seas look like a field of battle, where still lie all the conquered of the ocean ; some old and already encrusted, others fresh and reflecting from their iron bands and copper plates the brilliancy of our lantern.

On the 15th of May we were at the extreme south of the

Bank of Newfoundland. This bank consists of alluvia, or large heaps of organic matter, brought either from the Equator by the Gulf Stream, or from the North Pole by the counter-current of cold water which skirts the American coast. There also are heaped up those erratic blocks which are carried along by the broken ice ; and close by, a vast charnel-house of molluscs, which perish here by millions. The depth of the sea is not great at Newfoundland—not more than some hundreds of fathoms ; but towards the south is a depression of 1,500 fathoms. There the Gulf Stream widens. It loses some of its speed and some of its temperature, but it becomes a sea.

It was on the 17th of May, about 500 miles from Heart's Content, at a depth of more than 1,400 fathoms, that I saw the electric cable lying on the bottom. Conseil, to whom I had not mentioned it, thought at first that it was a gigantic sea-serpent. But I undeceived the worthy fellow, and by way of consolation related several particulars in the laying of this cable. The first one was laid in the years 1857 and 1858 ; but, after transmitting about 400 telegrams, would not act any longer. In 1863 the engineers constructed another one, measuring 2,000 miles in length, and weighing 4,500 tons, which was embarked on the *Great Eastern*. This attempt also failed.

On the 25th of May the *Nautilus*, being at a depth of more than 1,918 fathoms, was on the precise spot where the rupture occurred which ruined the enterprise. It was within 638 miles of the coast of Ireland ; and at half-past two in the afternoon they discovered that communication with Europe had ceased. The electricians on board resolved to cut the cable before fishing it up, and at eleven o'clock at night they had recovered the damaged part. They made another point and spliced it, and it was once more submerged. But some days after it broke again, and in the depths of the ocean could not be recaptured. The Americans, however, were not discouraged. Cyrus Field, the bold promoter of the enterprise, as he had sunk all his own

fortune, set a new subscription on foot, which was at once answered, and another cable was constructed on better principles. The bundles of conducting wires were each enveloped in gutta-percha, and protected by a wadding of hemp, contained in a metallic covering. The *Great Eastern* sailed on the 13th of July, 1866. The operation worked well. But one incident occurred. Several times in unrolling the cable they observed that nails had recently been forced into it, evidently with the motive of destroying it. Captain Anderson, the officers, and engineers consulted together, and had it posted up that, if the offender was surprised on board, he would be thrown without further trial into the sea. From that time the criminal attempt was never repeated.

On the 23rd of July the *Great Eastern* was not more than 500 miles from Newfoundland, when they telegraphed from Ireland the news of the armistice concluded between Prussia and Austria after Sadowa. On the 27th, in the midst of heavy fogs, they reached the port of Heart's Content. The enterprise was successfully terminated ; and for its first despatch, young America addressed old Europe in these words of wisdom, so rarely understood : "Glory to God in the highest, and on earth peace, goodwill towards men."

I did not expect to find the electric cable in its primitive state, such as it was on leaving the manufactory. The long serpent, covered with the remains of shells, bristling with foraminiferæ, was encrusted with a strong coating which served as a protection against all boring molluscs. It lay quietly sheltered from the motions of the sea, and under a favourable pressure for the transmission of the electric spark which passes from Europe to America in .32 of a second. Doubtless this cable will last for a great length of time, for they find that the gutta-percha covering is improved by the sea-water. Besides, on this level, so well chosen, the cable is never so deeply submerged as to cause it to break. The *Nautilus* followed it to the lowest depth, which was more than 2,212 fathoms, and there it lay without any anchorage ; and then we reached the spot where

the accident had taken place in 1863. The bottom of the ocean then formed a valley about 100 miles broad, in which Mont Blanc might have been placed without its summit appearing above the waves. This valley is closed at the east by a perpendicular wall more than 2,000 yards high. We arrived there on the 28th of May, and the *Nautilus* was then not more than 120 miles from Ireland.

Was Captain Nemo going to land on the British Isles? No. To my great surprise he made for the south, once more coming back towards European seas. In rounding the Emerald Isle, for one instant I caught sight of Cape Clear, and the light which guides the thousands of vessels leaving Glasgow or Liverpool. An important question then arose in my mind. Did the *Nautilus* dare entangle itself in the Manche? Ned Land, who had re-appeared since we had been nearing land, did not cease to question me. How could I answer? Captain Nemo remained invisible. After having shown the Canadian a glimpse of American shores, was he going to show me the coast of France?

But the *Nautilus* was still going southward. On the 30th of May, it passed in sight of Land's End, between the extreme point of England and the Scilly Isles, which were left to starboard. If we wished to enter the Manche, he must go straight to the east. He did not do so.

During the whole of the 31st of May, the *Nautilus* described a series of circles on the water, which greatly interested me. It seemed to be seeking a spot it had some trouble in finding. At noon, Captain Nemo himself came to work the ship's log. He spoke no word to me, but seemed gloomier than ever. What could sadden him thus? Was it his proximity to European shores? Had he some recollections of his abandoned country? If not, what did he feel? Remorse or regret? For a long while this thought haunted my mind, and I had a kind of presentiment that before long chance would betray the captain's secrets.

The next day, the 1st of June, the *Nautilus* continued the same process. It was evidently seeking some particular

spot in the ocean. Captain Nemo took the sun's altitude as he had done the day before. The sea was beautiful, the sky clear. About eight miles to the east, a large steam vessel could be discerned on the horizon. No flag fluttered from its mast, and I could not discover its nationality. Some minutes before the sun passed the meridian, Captain Nemo took his sextant, and watched with great attention. The perfect rest of the water greatly helped the operation. The *Nautilus* was motionless ; it neither rolled nor pitched.

I was on the platform when the altitude was taken, and the Captain pronounced these words : " It is here."

He turned and went below. Had he seen the vessel which was changing its course and seemed to be nearing us ? I could not tell. I returned to the saloon. The panels closed, I heard the hissing of the water in the reservoirs. The *Nautilus* began to sink, following a vertical line, for its screw communicated no motion to it. Some minutes later it stopped at a depth of more than 420 fathoms, resting on the ground. The luminous ceiling was darkened, then the panels were opened, and through the glass I saw the sea brilliantly illuminated by the rays of our lantern for at least half a mile round us.

I looked to the port side, and saw nothing but an immensity of quiet waters. But to starboard, on the bottom appeared a large protuberance, which at once attracted my attention. One would have thought it a ruin buried under a coating of white shells, much resembling a covering of snow. Upon examining the mass attentively, I could recognise the ever-thickening form of a vessel bare of its masts, which must have sunk. It certainly belonged to past times. This wreck, to be thus encrusted with the lime of the water, must already be able to count many years passed at the bottom of the ocean.

What was this vessel ? Why did the *Nautilus* visit its tomb ? Could it have been aught but a shipwreck which had drawn it under the water ? I knew not what to think, when near me in a slow voice I heard Captain Nemo say :

“ At one time this ship was called the *Marseillais*. It carried seventy-four guns, and was launched in 1762. In 1778, the 13th of August, commanded by La Poype-Vertrieux, it fought boldly against the *Preston*. In 1779, on the 4th of July, it was at the taking of Grenada, with the squadron of Admiral Estaing. In 1781, on the 5th of September, it took part in the battle of Comte de Grasse, in Chesapeake Bay. In 1794, the French Republic changed its name. On the 16th of April, in the same year, it joined the squadron of Villaret Joyeuse, at Brest, being entrusted with the escort of a cargo of corn coming from America, under the command of Admiral Van Stebel. On the 11th and 12th Prairal of the second year, this squadron fell in with an English vessel. Sir, to-day is the 13th Prairal, the first of June, 1868. It is now seventy-four years ago, day for day on this very spot, in latitude $47^{\circ} 24'$, longitude $17^{\circ} 28'$, that this vessel, after fighting heroically, losing its three masts, with the water in its hold, and the third of its crew disabled, preferred sinking with its 356 sailors to surrendering ; and, nailing its colours to the poop, disappeared under the waves to the cry of ‘ Long live the Republic ! ’ ”

“ The *Avenger* ! ” I exclaimed.

“ Yes, sir, the *Avenger* ! A good name ! ” muttered Captain Nemo, crossing his arms.

CHAPTER XXI

A HECATOMB

THE way of describing this unlooked-for scene, the history of the patriot ship, told at first so coldly, and the emotion with which this strange man pronounced the last words, the name of the *Avenger*, the significance of which could not escape me, all impressed itself deeply on my mind. My eyes did not leave the Captain, who, with his hand stretched out to sea, was watching with a glowing eye the glorious

wreck. Perhaps I was never to know who he was, from whence he came, or where he was going to, but I saw the man move, and apart from the savant. It was no common misanthropy which had shut Captain Nemo and his companions within the *Nautilus*, but a hatred, either monstrous or sublime, which time could never weaken. Did this hatred still seek for vengeance? The future would soon teach me that. But the *Nautilus* was rising slowly to the surface of the sea, and the form of the *Avenger* disappeared by degrees from my sight. Soon a slight rolling told me that we were in the open air. At that moment a dull boom was heard. I looked at the Captain. He did not move.

"Captain?" said I.

He did not answer. I left him and mounted the platform. Conseil and the Canadian were already there.

"Where did that sound come from?" I asked.

"It was a gunshot," replied Ned Land.

I looked in the direction of the vessel I had already seen. It was nearing the *Nautilus*, and we could see that it was putting on steam. It was within six miles of us.

"What is that ship, Ned?"

"By its rigging, and the height of its lower masts," said the Canadian, "I bet she is a ship-of-war. May it reach us; and, if necessary, sink this cursed *Nautilus*."

"Friend Ned," replied Conseil, "what harm can it do to the *Nautilus*? Can it attack it beneath the waves? Can it cannonade us at the bottom of the sea?"

"Tell me, Ned," said I, "can you recognise what country she belongs to?"

The Canadian knitted his eyebrows, dropped his eyelids, and screwed up the corners of his eyes, and for a few moments fixed a piercing look upon the vessel.

"No, sir," he replied; "I cannot tell what nation she belongs to, for she shows no colours. But I can declare she is a man-of-war, for a long pennant flutters from her main mast."

For a quarter of an hour we watched the ship which was

steaming towards us. I could not, however, believe that she could see the *Nautilus* from that distance ; and still less that she could know what this submarine engine was. Soon the Canadian informed me that she was a large, armoured, two-decker ram. A thick black smoke was pouring from her two funnels. Her closely-furled sails were stopped to her yards. She hoisted no flag at her mizzen-peak. The distance prevented us from distinguishing the colours of her pennant, which floated like a thin ribbon. She advanced rapidly. If Captain Nemo allowed her to approach, there was a chance of salvation for us.

"Sir," said Ned Land, "if that vessel passes within a mile of us I shall throw myself into the sea, and I should advise you to do the same."

I did not reply to the Canadian's suggestion, but continued watching the ship. Whether English, French, American, or Russian, she would be sure to take us in if we could only reach her. Presently a white smoke burst from the fore part of the vessel ; some seconds after, the water, agitated by the fall of a heavy body, splashed the stern of the *Nautilus*, and shortly afterwards a loud explosion struck my ear.

"What ! they are firing at us !" I exclaimed.

"So please you, sir," said Ned, "they have recognised the unicorn, and they are firing at us."

"But," I exclaimed, "surely they can see that there are men in the case ?"

"It is, perhaps, because of that," replied Ned Land, looking at me.

A whole flood of light burst upon my mind. Doubtless they knew now how to believe the stories of the pretended monster. No doubt, on board the *Abraham Lincoln*, when the Canadian struck it with the harpoon, Commander Farragut had recognised in the supposed narwhal a submarine vessel, more dangerous than a supernatural cetacean. Yes, it must have been so ; and on every sea they were now seeking this engine of destruction. Terrible

indeed ! if, as we supposed, Captain Nemo employed the *Nautilus* in works of vengeance. On the night when we were imprisoned in that cell, in the midst of the Indian Ocean, had he not attacked some vessel ? The man buried in the coral cemetery, had he not been a victim to the shock caused by the *Nautilus* ? Yes, I repeat it, it must be so. One part of the mysterious existence of Captain Nemo had been unveiled ; and, if his identity had not been recognised, at least, the nations united against him were no longer hunting a chimerical creature, but a man who had vowed a deadly hatred against them. All the formidable past rose before me. Instead of meeting friends on board the approaching ship, we could only expect pitiless enemies. But the shot rattled about us. Some of them struck the sea and ricocheted, losing themselves in the distance. But none touched the *Nautilus*. The vessel was not more than three miles from us. In spite of the serious cannonade, Captain Nemo did not appear on the platform ; but, if one of the conical projectiles had struck the shell of the *Nautilus*, it would have been fatal. The Canadian then said, “ Sir, we must do all we can to get out of this dilemma. Let us signal them. They will then, perhaps, understand that we are honest folks.”

Ned Land took his handkerchief to wave in the air ; but he had scarcely displayed it, when he was struck down by an iron hand, and fell, in spite of his great strength, upon the deck.

“ Fool ! ” exclaimed the Captain, “ do you wish to be pierced by the spur of the *Nautilus* before it is hurled at this vessel ? ”

Captain Nemo was terrible to hear ; he was still more terrible to see. His face was deadly pale, with a spasm at his heart. For an instant it must have ceased to beat. His pupils were fearfully contracted. He did not speak, he roared, as, with his body thrown forward, he wrung the Canadian’s shoulders. Then, leaving him, and turning to the ship of war, whose shot was still raining around him,

he exclaimed, with a powerful voice, "Ah, ship of an accursed nation, you know who I am ! I do not want your colours to know you by ! Look ! and I will show you mine !"

And on the fore part of the platform Captain Nemo unfurled a black flag, similar to the one he had placed at the South Pole. At that moment a shot struck the shell of the *Nautilus* obliquely, without piercing it ; and, rebounding near the Captain, was lost in the sea. He shrugged his shoulders ; and, addressing me, said shortly, "Go down, you and your companions, go down !"

"Sir," I cried, "are you going to attack this vessel ?"

"Sir, I am going to sink it."

"You will not do that ?"

"I shall do it," he replied coldly. "And I advise you not to judge me, sir. Fate has shown you what you ought not to have seen. The attack has begun ; go down."

"What is this vessel ?"

"You do not know ? Very well ! so much the better ! Its nationality to you, at least, will be a secret. Go down !"

We could but obey. About fifteen of the sailors surrounded the Captain, looking with implacable hatred at the vessel nearing them. One could feel that the same desire of vengeance animated every soul. I went down at the moment another projectile struck the *Nautilus*, and I heard the Captain exclaim :

"Strike, mad vessel ! Shower your useless shot ! And then, you will not escape the spur of the *Nautilus*. But it is not here that you shall perish ! I would not have your ruins mingle with those of the *Avenger* !"

I reached my room. The Captain and his second had remained on the platform. The screw was set in motion, and the *Nautilus*, moving with speed, was soon beyond the reach of the ship's guns. But the pursuit continued, and Captain Nemo contented himself with keeping his distance.

About four in the afternoon, being no longer able to contain my impatience, I went to the central staircase. The panel was open, and I ventured on to the platform.

The Captain was still walking up and down with an agitated step. He was looking at the ship, which was five or six miles to leeward.

He was going round it like a wild beast, and, drawing it eastward, he allowed them to pursue. But he did not attack. Perhaps he still hesitated? I wished to mediate once more. But I had scarcely spoken, when Captain Nemo imposed silence, saying :

"I am the law, and I am the judge ! I am the oppressed, and there is the oppressor ! Through him I have lost all that I loved, cherished, and venerated—country, wife, children, father, and mother. I saw all perish ! All that I hate is there ! Say no more !"

I cast a last look at the man-of-war, which was putting on steam, and rejoined Ned and Conseil.

"We will fly !" I exclaimed.

"Good !" said Ned. "What is this vessel ?"

"I do not know ; but, whatever it is, it will be sunk before night. In any case, it is better to perish with it, than be made accomplices in a retaliation the justice of which we cannot judge."

"That is my opinion too," said Ned Land, coolly. "Let us wait for night."

Night arrived. Deep silence reigned on board. The compass showed that the *Nautilus* had not altered its course. It was on the surface, rolling slightly. My companions and I resolved to fly when the vessel should be near enough either to hear us or to see us ; for the moon, which would be full in two or three days, shone brightly. Once on board the ship, if we could not prevent the blow which threatened it, we could, at least we would, do all that circumstances would allow. Several times I thought the *Nautilus* was preparing for attack ; but Captain Nemo contented himself with allowing his adversary to approach, and then fled once more before it.

Part of the night passed without any incident. We watched the opportunity for action. We spoke little, for

we were too much moved. Ned Land would have thrown himself into the sea, but I forced him to wait. According to my idea, the *Nautilus* would attack the ship at her water-line, and then it would not only be possible, but easy to fly.

At three in the morning, full of uneasiness, I mounted the platform. Captain Nemo had not left it. He was standing at the fore part near his flag, which a slight breeze displayed above his head. He did not take his eyes from the vessel. The intensity of his look seemed to attract, and fascinate, and draw it onward more surely than if he had been towing it. The moon was then passing the meridian. Jupiter was rising in the east. Amid this peaceful scene of nature, sky and ocean rivalled each other in tranquillity, the sea offering to the orbs of night the finest mirror they could ever have in which to reflect their image. As I thought of the deep calm of these elements, compared with all those passions brooding imperceptibly within the *Nautilus*, I shuddered.

The vessel was within two miles of us. It was ever nearing that phosphorescent light which showed the presence of the *Nautilus*. I could see its green and red lights, and its white lantern hanging from the large foremast. An indistinct vibration quivered through its rigging, showing that the furnaces were heated to the uttermost. Sheaves of sparks and red ashes flew from the funnels, shining in the atmosphere like stars.

I remained thus until six in the morning, without Captain Nemo noticing me. The ship stood about a mile and a half from us, and with the first dawn of day the firing began afresh. The moment could not be far off when, the *Nautilus* attacking its adversary, my companions and myself should for ever leave this man. I was preparing to go down to remind them, when the second mounted the platform, accompanied by several sailors. Captain Nemo either did not or would not see them. Some steps were taken which might be called the signal for action. They were very simple. The iron balustrade around the platform was

lowered, and the lantern and pilot cages were pushed within the shell until they were flush with the deck. The long surface of the steel cigar no longer offered a single point to check its manœuvres. I returned to the saloon. The *Nautilus* still floated ; some streaks of light were filtering through the liquid beds. With the undulations of the waves the windows were brightened by the red streaks of the rising sun, and this dreadful day of the 2nd of June had dawned.

At five o'clock, the log showed that the speed of the *Nautilus* was slackening, and I knew that it was allowing them to draw nearer. Besides, the reports were heard more distinctly, and the projectiles, labouring through the ambient water, were extinguished with a strange hissing noise.

" My friends," said I, " the moment is come. One grasp of the hand, and may God protect us ! "

Ned Land was resolute, Conseil calm, myself so nervous that I knew not how to contain myself. We all passed into the library ; but the moment I pushed the door opening on to the central staircase, I heard the upper panel close sharply. The Canadian rushed on to the stairs, but I stopped him. A well-known hissing noise told me that the water was running into the reservoirs, and in a few minutes the *Nautilus* was some yards beneath the surface of the waves. I understood the manœuvre. It was too late to act. The *Nautilus* did not wish to strike at the impenetrable cuirass, but below the water-line, where the metallic covering no longer protected it.

We were again imprisoned, unwilling witnesses of the dreadful drama that was preparing. We had scarcely time to reflect ; taking refuge in my room, we looked at each other without speaking. A deep stupor had taken hold of my mind : thought seemed to stand still. I was in that painful state of expectation preceding a dreadful report. I waited, I listened, every sense was merged in that of hearing ! The speed of the *Nautilus* was accelerated. It was preparing to rush. The whole ship trembled. Suddenly I screamed. I felt the shock, but comparatively light. I felt

the penetrating power of the steel spur. I heard rattlings and scrapings. But the *Nautilus*, carried along by its propelling power, passed through the mass of the vessel like a needle through sailcloth !

I could stand it no longer. Mad, out of my mind, I rushed from my room into the saloon. Captain Nemo was there, mute, gloomy, implacable ; he was looking through the port panel. A large mass cast a shadow on the water ; and, that it might lose nothing of her agony, the *Nautilus* was going down into the abyss with her. Ten yards from me I saw the open shell, through which the water was rushing with the noise of thunder, then the double line of guns and the netting. The bridge was covered with black, agitated shadows.

The water was rising. The poor creatures were crowding the ratlings, clinging to the masts, struggling under the water. It was a human ant-heap overtaken by the sea. Paralysed, stiffened with anguish, my hair standing on end, with eyes wide open, panting, without breath, and without voice, I too was watching ! An irresistible attraction glued me to the glass ! Suddenly an explosion took place. The compressed air blew up her decks, as if the magazines had caught fire. Then the unfortunate vessel sank more rapidly. Her topmast, laden with victims, now appeared ; then her spars, bending under the weight of men ; and, last of all, the top of her mainmast. Then the dark mass disappeared, and with it the dead crew, drawn down by the strong eddy.

I turned to Captain Nemo. That terrible avenger, a perfect archangel of hatred, was still looking. When all was over, he turned to his room, opened the door, and entered. I followed him with my eyes. On the end wall beneath his heroes, I saw the portrait of a woman, still young, and two little children. Captain Nemo looked at them for some moments, stretched his arms towards them, and, kneeling down, burst into deep sobs.

CHAPTER XXII

THE LAST WORDS OF CAPTAIN NEMO

The panels had closed on this dreadful vision, but light had not returned to the saloon : all was silence and darkness within the *Nautilus*. At wonderful speed, a hundred feet beneath the water, it was leaving this desolate spot. Whither was it going ? To the north or south ? Where was the man flying to after such dreadful retaliation ? I had returned to my room, where Ned and Conseil had remained silent enough. I felt an insurmountable horror for Captain Nemo. Whatever he had suffered at the hands of these men, he had no right to punish thus. He had made me, if not an accomplice, at least a witness of his vengeance. At eleven the electric light reappeared. I passed into the saloon. It was deserted. I consulted the different instruments. The *Nautilus* was flying northward at the rate of twenty-five miles an hour, now on the surface, and now thirty feet below it. On taking the bearings by the chart, I saw that we were passing the mouth of the Manche, and that our course was hurrying us towards the northern seas at a frightful speed. That night we had crossed two hundred leagues of the Atlantic. The shadows fell, and the sea was covered with darkness until the rising of the moon. I went to my room, but could not sleep. I was troubled with dreadful nightmare. The horrible scene of destruction was continually before my eyes. From that day, who could tell into what part of the North Atlantic basin the *Nautilus* would take us ? Still with unaccountable speed. Still in the midst of these northern fogs. Would it touch at Spitzbergen, or on the shores of Nova Zembla ? Should we explore those unknown seas, the White Sea, the Sea of Kara, the Gulf of Obi, the Archipelago of Liarrov, and the unknown coast of Asia ? I could not say. I could no longer judge of the time that was passing. The clocks had been stopped on board. It seemed, as in polar countries, that night and day no longer followed their regular course. I felt myself being drawn

into that strange region where the foundered imagination of Edgar Poe roamed at will. Like the fabulous Gordon Pym, at every moment I expected to see "that veiled human figure, of larger proportions than those of any inhabitant of the earth, thrown across the cataract which defends the approach to the pole." I estimated (though, perhaps, I may be mistaken)—I estimated this adventurous course of the *Nautilus* to have lasted fifteen or twenty days. And I know not how much longer it might have lasted, had it not been for the catastrophe which ended this voyage. Of Captain Nemo I saw nothing whatever now, nor of his second. Not a man of the crew was visible for an instant. The *Nautilus* was almost incessantly under water. When we came to the surface to renew the air, the panels opened and shut mechanically. There were no more marks on the planisphere. I knew not where we were. And the Canadian, too, his strength and patience at an end, appeared no more. Conseil could not draw a word from him ; and, fearing that, in a dreadful fit of madness, he might kill himself, watched him with constant devotion. One morning (what date it was I could not say) I had fallen into a heavy sleep towards the early hours, a sleep both painful and unhealthy, when I suddenly awoke. Ned Land was leaning over me, saying, in a low voice, "We are going to fly."

I sat up.

"When shall we go ?" I asked.

"To-morrow night. All inspection on board the *Nautilus* seems to have ceased. All appear to be stupefied. You will be ready, sir ?"

"Yes ; where are we ?"

"In sight of land. I took the reckoning this morning in the fog—twenty miles to the east."

"What country is it ?"

"I do not know ; but, whatever it is, we will take refuge there."

"Yes, Ned, yes. We will fly to-night, even if the sea should swallow us up."

"The sea is bad, the wind violent, but twenty miles in that light boat of the *Nautilus* does not frighten me. Unknown to the crew, I have been able to procure food and some bottles of water."

"I will follow you."

"But," continued the Canadian, "if I am surprised, I will defend myself ; I will force them to kill me."

"We will die together, friend Ned."

I had made up my mind to all. The Canadian left me. I reached the platform, on which I could with difficulty support myself against the shock of the waves. The sky was threatening ; but, as land was in those thick brown shadows, we must fly. I returned to the saloon, fearing and yet hoping to see Captain Nemo, wishing and yet not wishing to see him. What could I have said to him ? Could I hide the involuntary horror with which he inspired me ? No. It was better that I should not meet him face to face ; better to forget him. And yet—— How long seemed that day, the last that I should pass in the *Nautilus*. I remained alone. Ned Land and Conseil avoided speaking, for fear of betraying themselves. At six I dined, but I was not hungry ; I forced myself to eat in spite of my disgust, that I might not weaken myself. At half-past six Ned Land came to my room, saying, "We shall not see each other again before our departure. At ten the moon will not be risen. We will profit by the darkness. Come to the boat ; Conseil and I will wait for you."

The Canadian went out without giving me time to answer. Wishing to verify the course of the *Nautilus*, I went to the saloon. We were running N.N.E. at frightful speed, and more than fifty yards deep. I cast a last look on these wonders of nature, on the riches of art heaped up in this museum, upon the unrivalled collection destined to perish at the bottom of the sea, with him who had formed it. I wished to fix an indelible impression of it in my mind. I remained an hour thus, bathed in the light of that luminous ceiling, and passing in review those treasures

shining under their glasses. Then I returned to my room.

I dressed myself in strong sea clothing. I collected my notes, placing them carefully about me. My heart beat loudly. I could not check its pulsations. Certainly my trouble and agitation would have betrayed me to Captain Nemo's eyes. What was he doing at this moment ? I listened at the door of his room. I heard steps. Captain Nemo was there. He had not gone to rest. At every moment I expected to see him appear, and ask me why I wished to fly. I was constantly on the alert. My imagination magnified everything. The impression became at last so poignant that I asked myself if it would not be better to go to the Captain's room, see him face to face, and brave him with look and gesture.

It was the inspiration of a madman ; fortunately I resisted the desire, and stretched myself on my bed to quiet my bodily agitation. My nerves were somewhat calmer, but in my excited brain I saw over again all my existence on board the *Nautilus* ; every incident, either happy or unfortunate, which had happened since my disappearance from the *Abraham Lincoln*—the submarine hunt, the Torres Straits, the savages of Papua, the running ashore, the coral cemetery, the passage of Suez, the Island of Santorin, the Cretan diver, Vigo Bay, Atlantis, the iceberg, the South Pole, the imprisonment in the ice, the fight among the poulps, the storm in the Gulf Stream, the *Avenger*, and the horrible scene of the vessel sunk with all her crew. All these events passed before my eyes like scenes in a drama. Then Captain Nemo seemed to grow enormously, his features to assume superhuman proportions. He was no longer my equal, but a man of the waters, the genie of the sea.

It was then half-past nine. I held my head between my hands to keep it from bursting. I closed my eyes ; I would not think any longer. There was another half-hour to wait, another half-hour of a nightmare, which might drive me mad.

At that moment I heard the distant strains of the organ, a sad harmony to an undefinable chaunt, the wail of a soul longing to break these earthly bonds. I listened with every

sense, scarcely breathing ; plunged, like Captain Nemo, in that musical ecstasy, which was drawing him in spirit to the end of life.

Then a sudden thought terrified me. Captain Nemo had left his room. He was in the saloon, which I must cross to fly. There I should meet him for the last time. He would see me, perhaps speak to me. A gesture of his might destroy me, a single word chain me on board.

But ten was about to strike. The moment had come for me to leave my room, and join my companions.

I must not hesitate, even if Captain Nemo himself should rise before me. I opened my door carefully ; and even then, as it turned on its hinges, it seemed to me to make a dreadful noise. Perhaps it only existed in my own imagination.

I crept along the dark stairs of the *Nautilus*, stopping at each step to check the beating of my heart. I reached the door of the saloon, and opened it gently. It was plunged in profound darkness. The strains of the organ sounded faintly. Captain Nemo was there. He did not see me. In the full light I do not think he would have noticed me, so entirely was he absorbed in the ecstasy.

I crept along the carpet, avoiding the slightest sound which might betray my presence. I was at least five minutes reaching the door, at the opposite side, opening into the library.

I was going to open it, when a sigh from Captain Nemo nailed me to the spot. I knew that he was rising. I could even see him, for the light from the library came through to the saloon. He came towards me silently, with his arms crossed, gliding like a spectre rather than walking. His breast was swelling with sobs ; and I heard him murmur these words (the last which ever struck my ear) :

“ Almighty God ! enough ! enough ! ”

Was it a confession of remorse which thus escaped from this man’s conscience ?

In desperation, I rushed through the library, mounted the central staircase, and, following the upper flight,

reached the boat. I crept through the opening, which had already admitted my two companions.

"Let us go ! let us go !" I exclaimed.

"Directly !" replied the Canadian.

The orifice in the plates of the *Nautilus* was first closed, and fastened down by means of a false key, with which Ned Land had provided himself ; the opening in the boat was also closed. The Canadian began to loosen the bolts which still held us to the submarine boat.

Suddenly a noise was heard. Voices were answering each other loudly. What was the matter ? Had they discovered our flight ? I felt Ned Land slipping a dagger into my hand.

"Yes," I murmured, "we know how to die !"

The Canadian had stopped in his work. But one word many times repeated, a dreadful word, revealed the cause of the agitation spreading on board the *Nautilus*. It was not we the crew were looking after !

"The maelstrom ! the maelstrom !" I exclaimed.

The maelstrom ! Could a more dreadful word in a more dreadful situation have sounded in our ears ! We were then upon the dangerous coast of Norway. Was the *Nautilus* being drawn into this gulf at the moment our boat was going to leave its sides ? We knew that at the tide the pent-up waters between the islands of Ferroe and Loffoden rush with irresistible violence, forming a whirlpool from which no vessel ever escapes. From every point of the horizon enormous waves were meeting, forming a gulf justly called the "Navel of the Ocean," whose power of attraction extends to a distance of twelve miles. There, not only vessels, but whales are sacrificed, as well as white bears from the northern regions.

It is thither that the *Nautilus*, voluntarily or involuntarily, had been run by the Captain.

It was describing a spiral, the circumference of which was lessening by degrees, and the boat, which was still fastened to its side, was carried along with giddy speed. I felt that sickly giddiness which arises from long-continued whirling round.

We were in dread. Our horror was at its height, circulation had stopped, all nervous influence was annihilated, and we were covered with cold sweat, like a sweat of agony ! And what noise around our frail bark ! What roarings repeated by the echo miles away ! What an uproar was that of the waters broken on the sharp rocks at the bottom, where the hardest bodies are crushed, and trees worn away, " with all the fur rubbed off," according to the Norwegian phrase !

What a situation to be in ! We rocked frightfully. The *Nautilus* defended itself like a human being. Its steel muscles cracked. Sometimes it seemed to stand upright, and we with it !

" We must hold on," said Ned, " and look after the bolts. We may still be saved if we stick to the *Nautilus*."

He had not finished the words, when we heard a crashing noise, the bolts gave way, and the boat, torn from its groove, was hurled like a stone from a sling into the midst of the whirlpool.

My head struck on a piece of iron, and with the violent shock I lost all consciousness.

CHAPTER XXIII

CONCLUSION

Thus ends the voyage under the seas. What passed during that night—how the boat escaped from the eddies of the maelstrom—how Ned Land, Conseil, and myself ever came out of the gulf, I cannot tell.

But when I returned to consciousness, I was lying in a fisherman's hut, on the Loffoden Isles. My two companions, safe and sound, were near me holding my hands. We embraced each other heartily.

At that moment we could not think of returning to France. The means of communication between the north of Norway and the south are rare. And I am therefore

obliged to wait for the steamboat running monthly from Cape North.

And, among the worthy people who have so kindly received us, I revise my record of these adventures once more. Not a fact has been omitted, not a detail exaggerated. It is a faithful narrative of this incredible expedition in an element inaccessible to man, but to which Progress will one day open a road.

Shall I be believed ? I do not know. And it matters little, after all. What I now affirm is, that I have a right to speak of these seas, under which, in less than ten months, I have crossed 20,000 leagues in that submarine tour of the world, which has revealed so many wonders.

But what has become of the *Nautilus* ? Did it resist the pressure of the maelstrom ? Does Captain Nemo still live ? And does he still follow under the ocean those frightful retaliations ? Or, did he stop after the last hecatomb ?

Will the waves one day carry to him this manuscript containing the history of his life ? Shall I ever know the name of this man ? Will the missing vessel tell us by its nationality that of Captain Nemo ?

I hope so. And I also hope that his powerful vessel has conquered the sea at its most terrible gulf, and that the *Nautilus* has survived where so many other vessels have been lost ! If it be so—if Captain Nemo still inhabits the ocean, his adopted country, may hatred be appeased in that savage heart ! May the contemplation of so many wonders extinguish for ever the spirit of vengeance ! May the judge disappear, and the philosopher continue the peaceful exploration of the sea ! If his destiny be strange, it is also sublime. Have I not understood it myself ? Have I not lived ten months of this unnatural life ? And to the question asked by Ecclesiastes three thousand years ago, “ That which is far off and exceeding deep, who can find it out ? ” two men alone of all now living have the right to give an answer—

CAPTAIN NEMO AND MYSELF.

AROUND THE WORLD IN
EIGHTY DAYS



AROUND THE WORLD IN EIGHTY DAYS

CHAPTER I

IN WHICH PHILEAS FOGG AND PASSEPARTOUT ACCEPT
EACH OTHER, THE ONE AS MASTER, THE OTHER AS
MAN

Mr. Phileas Fogg lived, in 1872, at No. 7, Saville Row, Burlington Gardens, the house in which Sheridan died in 1814. He was one of the most noticeable members of the Reform Club, though he seemed always to avoid attracting attention ; an enigmatical personage, about whom little was known, except that he was a polished man of the world. People said that he resembled Byron—at least that his head was Byronic ; but he was a bearded, tranquil Byron, who might live on a thousand years without growing old.

Certainly an Englishman, it was more doubtful whether Phileas Fogg was a Londoner. He was never seen on 'Change, nor at the Bank, nor in the counting-rooms of the " City " ; no ships ever came into London docks of which he was the owner ; he had no public employment ; he had never been entered at any of the Inns of Court, either at the Temple, or Lincoln's Inn, or Gray's Inn ; nor had his voice ever resounded in the Court of Chancery, or in the Exchequer, or the Queen's Bench, or the Ecclesiastical Courts. He certainly was not a manufacturer ; nor was he a merchant or a gentleman farmer. His name was strange to the scientific and learned societies, and he never was known to take part in the sage deliberations of the Royal Institution or the London Institution, the Artisan's Association, or the Institution of Arts and Sciences. He belonged, in fact, to none of the numerous societies which swarm in the English capital, from the Harmonic to that of the Entomologists, founded mainly for the purpose of abolishing pernicious insects.

Phileas Fogg was a member of the Reform, and that was all.

The way in which he got admission to this exclusive club was simple enough.

He was recommended by the Barings, with whom he had an open credit. His cheques were regularly paid at sight from his account current, which was always flush.

Was Phileas Fogg rich? Undoubtedly. But those who knew him best could not imagine how he had made his fortune, and Mr. Fogg was the last person to whom to apply for the information. He was not lavish, nor, on the contrary, avaricious; for, whenever he knew that money was needed for a noble, useful, or benevolent purpose, he supplied it quietly and sometimes anonymously. He was, in short, the least communicative of men. He talked very little, and seemed all the more mysterious for his taciturn manner. His daily habits were quite open to observation; but whatever he did was so exactly the same thing that he had always done before, that the wits of the curious were fairly puzzled.

Had he travelled? It was likely, for no one seemed to know the world more familiarly; there was no spot so secluded that he did not appear to have an intimate acquaintance with it. He often corrected, with a few clear words, the thousand conjectures advanced by members of the club as to lost and unheard-of travellers, pointing out the true probabilities, and seeming as if gifted with a sort of second sight, so often did events justify his predictions. He must have travelled everywhere, at least in the spirit.

It was at least certain that Phileas Fogg had not absented himself from London for many years. Those who were honoured by a better acquaintance with him than the rest, declared that nobody could pretend to have ever seen him anywhere else. His sole pastimes were reading the papers and playing whist. He often won at this game, which, as a

silent one, harmonised with his nature ; but his winnings never went into his purse, being reserved as a fund for his charities. Mr. Fogg played, not to win, but for the sake of playing. The game was in his eyes a contest, a struggle with a difficulty, yet a motionless, unwearied struggle, congenial to his tastes.

Phileas Fogg was not known to have either wife or children, which may happen to the most honest people ; either relatives or near friends, which is certainly more unusual. He lived alone in his house in Saville Row, whither none penetrated. A single domestic sufficed to serve him. He breakfasted and dined at the club, at hours mathematically fixed, in the same room, at the same table, never taking his meals with other members, much less bringing a guest with him ; and went home at exactly midnight, only to retire at once to bed. He never used the cosy chambers which the Reform provides for its favoured members. He passed ten hours out of the twenty-four in Saville Row, either in sleeping or making his toilet. When he chose to take a walk it was with a regular step in the entrance hall with its mosaic flooring, or in the circular gallery with its dome supported by twenty red porphyry Ionic columns, and illumined by blue painted windows. When he breakfasted or dined all the resources of the club—its kitchens and pantries, its buttery and dairy—aided to crowd his table with their most succulent stores ; he was served by the gravest waiters, in dress coats, and shoes with swan-skin soles, who proffered the viands in special porcelain, and on the finest linen ; club decanters, of a lost mould, contained his sherry, his port, and his cinnamon-spiced claret ; while his beverages were refreshingly cooled with ice, brought at great cost from the American lakes.

If to live in this style is to be eccentric, it must be confessed that there is something good in eccentricity.

The mansion in Saville Row, though not sumptuous, was exceedingly comfortable. The habits of its occupant were such as to demand but little from the sole domestic,

but Phileas Fogg required him to be almost superhumanly prompt and regular. On this very 2nd of October he had dismissed James Forster, because that luckless youth had brought him shaving-water at eighty-four degrees Fahrenheit instead of eighty-six ; and he was awaiting his successor, who was due at the house between eleven and half-past.

Phileas Fogg was seated squarely in his armchair, his feet close together like those of a grenadier on parade, his hands resting on his knees, his body straight, his head erect ; he was steadily watching a complicated clock which indicated the hours, the minutes, the seconds, the days, the months, and the years. At exactly half-past eleven Mr. Fogg would, according to his daily habit, quit Saville Row, and repair to the Reform.

A rap at this moment sounded on the door of the cosy apartment where Phileas Fogg was seated, and James Forster, the dismissed servant, appeared.

"The new servant," said he.

A young man of thirty advanced and bowed.

"You are a Frenchman, I believe," asked Phileas Fogg, "and your name is John ?"

"Jean, if monsieur pleases," replied the newcomer, "Jean Passepartout, a surname which has clung to me because I have a natural aptness for going out of one business into another. I believe I'm honest, monsieur, but, to be outspoken, I've had several trades. I've been an itinerant singer, a circus-rider, when I used to vault like Leotard, and dance on a rope like Blondin. Then I got to be a professor of gymnastics, so as to make better use of my talents ; and then I was a sergeant fireman at Paris, and assisted at many a big fire. But I quitted France five years ago, and, wishing to taste the sweets of domestic life, took service as a valet here in England. Finding myself out of place, and hearing that Monsieur Phileas Fogg was the most exact and settled gentleman in the United Kingdom, I have come to monsieur in the hope of living with him a tranquil life, and forgetting even the name of Passepartout."

"Passepartout suits me," responded Mr. Fogg. "You are well recommended to me ; I hear a good report of you. You know my conditions ? "

"Yes, monsieur."

"Good ! What time is it ? "

"Twenty-two minutes after eleven," returned Passepartout, drawing an enormous silver watch from the depths of his pocket.

"You are too slow," said Mr. Fogg.

"Pardon me, monsieur, it is impossible——"

"You are four minutes too slow. No matter ; it's enough to mention the error. Now from this moment, twenty-nine minutes after eleven, a.m., this Wednesday, 2nd October, you are in my service."

Phileas Fogg got up, took his hat in his left hand, put it on his head with an automatic motion, and went off without a word.

Passepartout heard the street door shut once ; it was his new master going out. He heard it shut again ; it was his predecessor, James Forster, departing in his turn. Passepartout remained alone in the house in Saville Row.

CHAPTER II

IN WHICH PASSEPARTOUT IS CONVINCED THAT HE
HAS AT LAST FOUND HIS IDEAL

"Faith," muttered Passepartout, somewhat flurried
"I've seen people at Madame Tussaud's as lively as my new master ! "

Madame Tussaud's "people," let it be said, are of wax, and are much visited in London ; speech is all that is wanting to make them human. .

During his brief interview with Mr. Fogg, Passepartout had been carefully observing him. He appeared to be a man about forty years of age, with fine, handsome features,

and a tall, well-shaped figure ; his hair and whiskers were light, his forehead compact and unwrinkled, his face rather pale, his teeth magnificent. His countenance possessed in the highest degree what physiognomists call "repose in action," a quality of those who act rather than talk. Calm and phlegmatic, with a clear eye, Mr. Fogg seemed a perfect type of that English composure which Angelica Kauffmann has so skilfully represented on canvas. Seen in the various phases of his daily life, he gave the idea of being perfectly well-balanced, as exactly regulated as a Leroy chronometer. Phileas Fogg was, indeed, exactitude personified, and this was betrayed even in the expression of his very hands and feet ; for in men, as well as in animals, the limbs themselves are expressive of the passions.

He was so exact that he was never in a hurry, was always ready, and was economical alike of his steps and his motions. He never took one step too many, and always went to his destination by the shortest cut ; he made no superfluous gestures, and was never seen to be moved or agitated. He was the most deliberate person in the world, yet always reached his destination at the exact moment.

He lived alone, and, so to speak, outside of every social relation ; and as he knew that in this world account must be taken of friction, and that friction retards, he never rubbed against anybody.

As for Passepartout, he was a true Parisian of Paris. Since he had abandoned his own country for England, taking service as a valet, he had in vain searched for a master after his own heart. Passepartout was by no means one of those pert dunces depicted by Molière, with a bold gaze and a nose held high in the air ; he was an honest fellow, with a pleasant face, lips a trifle protruding, soft-mannered and serviceable, with a good round head, such as one likes to see on the shoulders of a friend. His eyes were blue, his complexion rubicund, his figure almost portly and well-built, his body muscular, and his physical powers fully developed by the exercises of his younger days. His brown

hair was somewhat tumbled ; for, while the ancient sculptors are said to have known eighteen methods of arranging Minerva's tresses, Passepartout was familiar with but one of dressing his own : three strokes of a large-tooth comb completed his toilet.

It would be rash to predict how Passepartout's lively nature would agree with Mr. Fogg. It was impossible to tell whether the new servant would turn out as absolutely methodical as his master required ; experience alone could solve the question. Passepartout had been a sort of vagrant in his early years, and now yearned for repose ; but so far he had failed to find it, though he had already served in ten English houses. But he could not take root in any of these ; with chagrin, he found his masters invariably whimsical and irregular, constantly running about the country, or on the look-out for adventure. His last master, young Lord Longferry, Member of Parliament, after passing his nights in the Haymarket taverns, was too often brought home in the morning on policemen's shoulders. Passepartout, desirous of respecting the gentleman whom he served, ventured a mild remonstrance on such conduct ; which, being ill-received, he took his leave. Hearing that Mr. Phileas Fogg was looking for a servant, and that his life was one of unbroken regularity, that he neither travelled nor stayed from home overnight, he felt sure that this would be the place he was after. He presented himself, and was accepted, as has been seen.

At half-past eleven, then, Passepartout found himself alone in the house in Saville Row. He began its inspection without delay, scouring it from cellar to garret. So clean, well-arranged, solemn a mansion pleased him ; it seemed to him like a snail's shell, lighted and warmed by gas, which sufficed for both these purposes. When Passepartout reached the second story he recognised at once the room which he was to inhabit, and he was well satisfied with it. Electric bells and speaking-tubes afforded communication with the lower stories ; while on the mantel stood an electric

clock, precisely like that in Mr. Fogg's bedchamber, both beating the same second at the same instant. "That's good, that'll do," said Passepartout to himself.

He suddenly observed, hung over the clock, a card which, upon inspection, proved to be a programme of the daily routine of the house. It comprised all that was required of the servant, from eight in the morning, exactly at which hour Phileas Fogg rose, till half-past eleven, when he left the house for the Reform Club—all the details of service, the tea and toast at twenty-three minutes past eight, the shaving-water at thirty-seven minutes past nine, and the toilet at twenty minutes before ten. Everything was regulated and foreseen that was to be done from half-past eleven a.m. till midnight, the hour at which the methodical gentleman retired.

Mr. Fogg's wardrobe was amply supplied and in the best taste. Each pair of trousers, coat, and vest bore a number, indicating the time of year and season at which they were in turn to be laid out for wearing ; and the same system was applied to the master's shoes. In short, the house in Saville Row, which must have been a very temple of disorder and unrest under the illustrious but dissipated Sheridan, was cosiness, comfort, and method idealised. There was no study, nor were there books, which would have been quite useless to Mr. Fogg ; for at the Reform two libraries, one of general literature and the other of law and politics, were at his service. A moderate-sized safe stood in his bedroom, constructed so as to defy fire as well as burglars ; but Passepartout found neither arms nor hunting weapons anywhere ; everything betrayed the most tranquil and peaceable habits.

Having scrutinised the house from top to bottom, he rubbed his hands, a broad smile overspread his features, and he said joyfully, "This is just what I wanted ! Ah, we shall get on together, Mr. Fogg and I ! What a domestic and regular gentleman ! A real machine ; well, I don't mind serving a machine."

CHAPTER III

IN WHICH A CONVERSATION TAKES PLACE WHICH
SEEMS LIKELY TO COST PHILEAS FOGG DEAR

Phileas Fogg, having shut the door of his house at half-past eleven, and having put his right foot before his left five hundred and seventy-five times, and his left foot before his right five hundred and seventy-six times, reached the Reform Club, an imposing edifice in Pall Mall, which could not have cost less than three millions. He repaired at once to the dining-room, the nine windows of which open upon a tasteful garden, where the trees were already gilded with an autumn colouring ; and took his place at the habitual table, the cover of which had already been laid for him. His breakfast consisted of a side-dish, a broiled fish with Reading sauce, a scarlet slice of roast beef garnished with mushrooms, a rhubarb and gooseberry tart, and a morsel of Cheshire cheese, the whole being washed down with several cups of tea, for which the Reform is famous. He rose at thirteen minutes to one, and directed his steps towards the large hall, a sumptuous apartment adorned with lavishly-framed paintings. A flunkey handed him an uncut *Times*, which he proceeded to cut with a skill which betrayed familiarity with this delicate operation. The perusal of this paper absorbed Phileas Fogg until a quarter before four, whilst the *Standard*, his next task, occupied him till the dinner hour. Dinner passed as breakfast had done, and Mr. Fogg re-appeared in the reading-room and sat down to the *Pall Mall* at twenty minutes before six. Half an hour later several members of the Reform came in and drew up to the fireplace, where a coal fire was steadily burning. They were Mr. Fogg's usual partners at whist : Andrew Stuart, an engineer ; John Sullivan and Samuel Fallentin, bankers ; Thomas Flanagan, a brewer ; and Gauthier Ralph, one of the Directors of the Bank of England—all rich and highly respectable personages, even in

a club which comprises the princes of English trade and finance.

"Well, Ralph," said Thomas Flanagan, "what about that robbery?"

"Oh," replied Stuart, "the Bank will lose the money."

"On the contrary," broke in Ralph, "I hope we may put our hands on the robber. Skilful detectives have been sent to all the principal ports of America and the Continent, and he'll be a clever fellow if he slips through their fingers."

"But have you got the robber's description?" asked Stuart.

"In the first place, he is no robber at all," returned Ralph, positively.

"What! a fellow who makes off with fifty-five thousand pounds, no robber?"

"No."

"Perhaps he's a manufacturer, then."

"The *Daily Telegraph* says that he is a gentleman."

It was Phileas Fogg, whose head now emerged from behind his newspapers, who made this remark. He bowed to his friends, and entered into the conversation. The affair which formed its subject, and which was town talk, had occurred three days before at the Bank of England. A package of banknotes, to the value of fifty-five thousand pounds, had been taken from the principal cashier's table, that functionary being at the moment engaged in registering the receipt of three shillings and sixpence. Of course, he could not have his eyes everywhere. Let it be observed that the Bank of England reposes a touching confidence in the honesty of the public. There are neither guards nor gratings to protect its treasures; gold, silver, banknotes are freely exposed, at the mercy of the first comer. A keen observer of English customs relates that, being in one of the rooms of the Bank one day, he had the curiosity to examine a gold ingot weighing some seven or eight pounds. He took it up, scrutinised it, passed it to his neighbour, he to the next man, and so on until the ingot, going from hand to

hand, was transferred to the end of a dark entry ; nor did it return to its place for half an hour. Meanwhile, the cashier had not so much as raised his head. But in the present instance things had not gone so smoothly. The package of notes not being found when five o'clock sounded from the ponderous clock in the "drawing office," the amount was passed to the account of profit and loss. As soon as the robbery was discovered, picked detectives hastened off to Liverpool, Glasgow, Havre, Suez, Brindisi, New York, and other ports, inspired by the proffered reward of two thousand pounds, and five per cent. on the sum that might be recovered. Detectives were also charged with narrowly watching those who arrived at or left London by rail, and a judicial examination was at once entered upon.

There were real grounds for supposing, as the *Daily Telegraph* said, that the thief did not belong to a professional band. On the day of the robbery a well-dressed gentleman of polished manners, and with a well-to-do air, had been observed going to and fro in the paying-room, where the crime was committed. A description of him was easily procured and sent to the detectives ; and some hopeful spirits, of whom Ralph was one, did not despair of his apprehension. The papers and clubs were full of the affair, and everywhere people were discussing the probabilities of a successful pursuit ; and the Reform Club was especially agitated, several of its members being Bank officials.

Ralph would not concede that the work of the detectives was likely to be in vain, for he thought that the prize offered would greatly stimulate their zeal and activity. But Stuart was far from sharing this confidence ; and, as they placed themselves at the whist-table, they continued to argue the matter. Stuart and Flanagan played together, while Phileas Fogg had Fallentin for his partner. As the game proceeded the conversation ceased, excepting between the rubbers, when it revived again.

"I maintain," said Stuart, "that the chances are in favour of the thief, who must be a shrewd fellow."

"Well, but where can he fly to?" asked Ralph. "No country is safe for him."

"Pshaw!"

"Where could he go, then?"

"Oh, I don't know that. The world is big enough."

"It was once," said Phileas Fogg, in a low tone. "Cut, sir," he added, handing the cards to Thomas Flanagan.

The discussion fell during the rubber, after which Stuart took up its thread.

"What do you mean by 'once'? Has the world grown smaller?"

"Certainly," returned Ralph. "I agree with Mr. Fogg. The world *has* grown smaller, since a man can now go round it ten times more quickly than a hundred years ago. And that is why the search for this thief will be more likely to succeed."

"And also why the thief can get away more easily."

"Be so good as to play, Mr. Stuart," said Phileas Fogg.

But the incredulous Stuart was not convinced, and when the hand was finished, said eagerly: "You have a strange way, Ralph, of proving that the world has grown smaller. So, because you can go round it in three months——"

"In eighty days," interrupted Phileas Fogg.

"That is true, gentlemen," added John Sullivan. "Only eighty days, now that the section between Rothal and Allahabad, on the Great Indian Peninsula Railway, has been opened. Here is the estimate made by the *Daily Telegraph*:

From London to Suez via Mont Cenis and

Brindisi, by rail and steamboats	.	.	7 days.
From Suez to Bombay, by steamer	.	.	13 "
From Bombay to Calcutta, by rail	.	.	3 "
From Calcutta to Hong Kong, by steamer	.	.	13 "
From Hong Kong to Yokohama (Japan), by steamer	.	.	6 "
From Yokohama to San Francisco, by steamer	.	.	22 "

From San Francisco to New York, by rail . . . 7 days.

From New York to London, by steamer and
rail 9 „

Total 80 days.”

“ Yes, in eighty days ! ” exclaimed Stuart, who in his excitement made a false deal. “ But that doesn’t take into account bad weather, contrary winds, shipwrecks, railway accidents, and so on.”

“ All included,” returned Phileas Fogg, continuing to play despite the discussion.

“ But suppose the Hindoos or Indians pull up the rails,” replied Stuart ; “ suppose they stop the trains, pillage the luggage-vans, and scalp the passengers ! ”

“ All included,” calmly retorted Fogg ; adding, as he threw down the cards, “ Two trumps.”

Stuart, whose turn it was to deal, gathered them up, and went on : “ You are right, theoretically, Mr. Fogg, but practically——”

“ Practically also, Mr. Stuart.”

“ I’d like to see you do it in eighty days.”

“ It depends on you. Shall we go ? ”

“ Heaven preserve me ! But I would wager four thousand pounds that such a journey, made under these conditions, is impossible.”

“ Quite possible, on the contrary,” returned Mr. Fogg.

“ Well, make it, then ! ”

“ The journey round the world in eighty days ? ”

“ Yes.”

“ I should like nothing better.”

“ When ? ”

“ At once. Only I warn you that I shall do it at your expense.”

“ It’s absurd ! ” cried Stuart, who was beginning to be annoyed at the persistency of his friend. “ Come, let’s go on with the game.”

"Deal over again, then," said Phileas Fogg. "There's a false deal."

Stuart took up the pack with a feverish hand ; then suddenly put them down again.

"Well, Mr. Fogg," said he, "it shall be so : I will wager the four thousand on it."

"Calm yourself, my dear Stuart," said Fallentin. "It's only a joke."

"When I say I'll wager," returned Stuart, "I mean it."

"All right," said Mr. Fogg ; and, turning to the others, he continued : "I have a deposit of twenty thousand at Baring's which I will willingly risk upon it."

"Twenty thousand pounds !" cried Sullivan. "Twenty thousand pounds, which you would lose by a single accidental delay !"

"The unforeseen does not exist," quietly replied Phileas Fogg.

"But, Mr. Fogg, eighty days are only the estimate of the least possible time in which the journey can be made."

"A well-used minimum suffices for everything."

"But, in order not to exceed it, you must jump mathematically from the trains upon the steamers, and from the steamers upon the trains again."

"I will jump—mathematically."

"You are joking."

"A true Englishman doesn't joke when he is talking about so serious a thing as a wager," replied Phileas Fogg, solemnly. "I will bet twenty thousand pounds against anyone who wishes that I will make the tour of the world in eighty days or less ; in nineteen hundred and twenty hours, or a hundred and fifteen thousand two hundred minutes. Do you accept ?"

"We accept," replied Messrs. Stuart, Fallentin, Sullivan, Flanagan, and Ralph, after consulting each other.

"Good," said Mr. Fogg. "The train leaves for Dover at a quarter before nine. I will take it."

"This very evening?" asked Stuart.

"This very evening," returned Phileas Fogg. He took out and consulted a pocket almanac, and added, "As to-day is Wednesday, the 2nd of October, I shall be due in London, in this very room of the Reform Club, on Saturday, the 21st of December, at a quarter before nine p.m.; or else the twenty thousand pounds, now deposited in my name at Baring's, will belong to you, in fact and in right, gentlemen. Here is a cheque for the amount."

A memorandum of the wager was at once drawn up and signed by the six parties, during which Phileas Fogg preserved a stoical composure. He certainly did not bet to win, and had only staked the twenty thousand pounds, half of his fortune, because he foresaw that he might have to expend the other half to carry out this difficult, not to say unattainable, project. As for his antagonists, they seemed much agitated; not so much by the value of their stake, as because they had some scruples about betting under conditions so difficult to their friend.

The clock struck seven, and the party offered to suspend the game so that Mr. Fogg might make his preparations for departure.

"I am quite ready now," was his tranquil response. "Diamonds are trumps: be so good as to play, gentlemen."

CHAPTER IV

IN WHICH PHILEAS FOGG ASTOUNDS PASSEPARTOUT,
HIS SERVANT

HAVING won twenty guineas at whist, and taken leave of his friends, Phileas Fogg, at twenty-five minutes past seven, left the Reform Club.

Passepartout, who had conscientiously studied the programme of his duties, was more than surprised to see his master guilty of the inexactness of appearing at this

unaccustomed hour ; for, according to rule, he was not due in Saville Row until precisely midnight.

Mr. Fogg repaired to his bedroom, and called out, "Passepartout !"

Passepartout did not reply. It could not be he who was called ; it was not the right hour.

"Passepartout !" repeated Mr. Fogg, without raising his voice.

Passepartout made his appearance.

"I've called you twice," observed his master.

"But it is not midnight," responded the other, showing his watch.

"I know it ; I don't blame you. We start for Dover and Calais in ten minutes."

A puzzled grin overspread Passepartout's round face ; clearly he had not comprehended his master.

"Monsieur is going to leave home ?"

"Yes," returned Phileas Fogg. "We are going round the world."

Passepartout opened wide his eyes, raised his eyebrows, held up his hands, and seemed about to collapse, so overcome was he with stupefied astonishment.

"Round the world !" he murmured.

"In eighty days," responded Mr. Fogg. "So we haven't a moment to lose."

"But the trunks ?" gasped Passepartout, unconsciously swaying his head from right to left.

"We'll have no trunks ; only a carpet-bag, with two shirts and three pairs of stockings for me, and the same for you. We'll buy our clothes on the way. Bring down my mackintosh and travelling-cloak, and some stout shoes, though we shall do little walking. Make haste !"

Passepartout tried to reply, but could not. He went out, mounted to his own room, fell into a chair, and muttered : "That's good, that is ! And I, who wanted to remain quiet !"

He mechanically set about making the preparations for

departure. Around the world in eighty days ! Was his master a fool ? No. Was this a joke, then ? They were going to Dover ; good ! To Calais ; good again ! After all, Passepartout, who had been away from France five years, would not be sorry to set foot on his native soil again. Perhaps they would go as far as Paris, and it would do his eyes good to see Paris once more. But surely a gentleman so chary of his steps would stop there ; no doubt—but, then, it was none the less true that he was going away, this so domestic person hitherto !

By eight o'clock Passepartout had packed the modest carpet-bag, containing the wardrobes of his master and himself ; then, still troubled in mind, he carefully shut the door of his room, and descended to Mr. Fogg.

Mr. Fogg was quite ready. Under his arm might have been observed a red-bound copy of *Bradshaw's Continental Railway Steam Transit and General Guide*, with its time-tables showing the arrival and departure of steamers and railways. He took the carpet-bag, opened it, and slipped into it a goodly roll of Bank of England notes, which would pass wherever he might go.

" You have forgotten nothing ? " asked he.

" Nothing, monsieur."

" My mackintosh and cloak ? "

" Here they are."

" Good ! Take this carpet-bag," handing it to Passepartout. " Take good care of it, for there are twenty thousand pounds in it."

Passepartout nearly dropped the bag, as if the twenty thousand pounds were in gold, and weighed him down.

Master and man then descended, the street-door was double-locked, and at the end of Saville Row they took a cab and drove rapidly to Charing Cross. The cab stopped before the railway station at twenty minutes past eight. Passepartout jumped off the box and followed his master, who, after paying the cabman, was about to enter the station, when a poor beggar-woman, with a child in her

arms, her naked feet smeared with mud, her head covered with a wretched bonnet, from which hung a tattered feather, and her shoulders shrouded in a ragged shawl, approached, and mournfully asked for alms.

Mr. Fogg took out the twenty guineas he had just won at whist, and handed them to the beggar, saying, "Here, my good woman. I'm glad that I met you"; and passed on.

Passepartout had a moist sensation about the eyes; his master's action touched his susceptible heart.

Two first-class tickets for Paris having been speedily purchased, Mr. Fogg was crossing the station to the train, when he perceived his five friends of the Reform.

"Well, gentlemen," said he, "I'm off, you see; and, if you will examine my passport when I get back, you will be able to judge whether I have accomplished the journey agreed upon."

"Oh, that would be quite unnecessary, Mr. Fogg," said Ralph politely. "We will trust your word, as a gentleman of honour."

"You do not forget when you are due in London again?" asked Stuart.

"In eighty days; on Saturday, the 21st of December, 1872, at a quarter before nine p.m. Good-bye, gentlemen."

Phileas Fogg and his servant seated themselves in a first-class carriage at twenty-minutes before nine; five minutes later the whistle screamed, and the train slowly glided out of the station.

The night was dark, and a fine, steady rain was falling. Phileas Fogg, snugly ensconced in his corner, did not open his lips. Passepartout, not yet recovered from his stupefaction, clung mechanically to the carpet-bag, with its enormous treasure.

Just as the train was whirling through Sydenham, Passepartout suddenly uttered a cry of despair.

"What's the matter?" asked Mr. Fogg.

"Alas! In my hurry—I—I forgot——"

"What?"

“ To turn off the gas in my room ! ”

“ Very well, young man,” returned Mr. Fogg, coolly ;
“ it will burn—at your expense.”

CHAPTER V

IN WHICH A NEW SPECIES OF FUNDS, UNKNOWN TO
THE MONEYED MEN, APPEARS ON 'CHANGE

Phileas Fogg rightly suspected that his departure from London would create a lively sensation at the West End. The news of the bet spread through the Reform Club, and afforded an exciting topic of conversation to its members. From the club it soon got into the papers throughout England. The boasted “ tour of the world ” was talked about, disputed, argued with as much warmth as if the subject were another Alabama claim. Some took sides with Phileas Fogg, but the large majority shook their heads and declared against him ; it was absurd, impossible, they declared, that the tour of the world could be made, except theoretically and on paper, in this minimum of time, and with the existing means of travelling. *The Times*, *Standard*, *Morning Post*, and *Daily News*, and twenty other highly respectable newspapers scouted Mr. Fogg's project as madness ; the *Daily Telegraph* alone hesitatingly supported him. People in general thought him a lunatic, and blamed his Reform Club friends for having accepted a wager which betrayed the mental aberration of its proposer.

Articles no less passionate than logical appeared on the question, for geography is one of the pet subjects of the English ; and the columns devoted to Phileas Fogg's venture were eagerly devoured by all classes of readers. At first some rash individuals, principally of the gentler sex, espoused his cause, which became still more popular when the *Illustrated London News* came out with his portrait, copied from a photograph in the Reform Club. A few readers of

the *Daily Telegraph* even dared to say, "Why not, after all? Stranger things have come to pass."

At last a long article appeared, on the 7th of October, in the bulletin of the Royal Geographical Society, which treated the question from every point of view, and demonstrated the utter folly of the enterprise.

Everything, it said, was against the travellers, every
• obstacle imposed alike by man and by nature. A miraculous agreement of the times of departure and arrival, which was impossible, was absolutely necessary to his success. He might, perhaps, reckon on the arrival of trains at the designated hours, in Europe, where the distances were relatively moderate; but when he calculated upon crossing India in three days, and the United States in seven, could he rely beyond misgiving upon accomplishing his task? There were accidents to machinery, the liability of trains to run off the line, collisions, bad weather, the blocking up by snow—were not all these against Phileas Fogg? Would he not find himself, when travelling by steamer in winter, at the mercy of the winds and fogs? Is it uncommon for the best ocean steamers to be two or three days behind time? But a single delay would suffice to fatally break the chain of communication; should Phileas Fogg once miss, even by an hour, a steamer, he would have to wait for the next, and that would irrevocably render his attempt vain.

This article made a great deal of noise, and, being copied into all the papers, seriously depressed the advocates of the rash tourist.

Everybody knows that England is the world of betting men, who are of a higher class than mere gamblers; to bet is in the English temperament. Not only the members of the Reform, but the general public, made heavy wagers for or against Phileas Fogg, who was set down in the betting books as if he were a race-horse. Bonds were issued, and made their appearance on 'Change; "Phileas Fogg bonds" were offered at par or at a premium, and a great business was done in them. But five days after the article

in the bulletin of the Geographical Society appeared, the demand began to subside : " Phileas Fogg " declined. They were offered by packages, at first of five, then of ten, until at last nobody would take less than twenty, fifty, a hundred !

Lord Albemarle, an elderly paralytic gentleman, was now the only advocate of Phileas Fogg left. This noble lord, who was fastened to his chair, would have given his fortune to be able to make the tour of the world, if it took ten years ; and he bet five thousand pounds on Phileas Fogg. When the folly as well as the uselessness of the adventure was pointed out to him, he contented himself with replying, " If the thing is feasible, the first to do it ought to be an Englishman."

The Fogg party dwindled more and more, everybody was going against him, and the bets stood a hundred and fifty and two hundred to one ; and a week after his departure an incident occurred which deprived him of backers at any price.

The commissioner of police was sitting in his office at nine o'clock one evening, when the following telegraphic despatch was put into his hands :

Suez to London.

ROWAN, COMMISSIONER OF POLICE, SCOTLAND YARD :

I've found the bank robber, Phileas Fogg. Send without delay warrant of arrest to Bombay.

FIX, *Detective.*

The effect of this despatch was instantaneous. The polished gentleman disappeared to give place to the bank robber. His photograph, which was hung with those of the rest of the members at the Reform Club, was minutely examined, and it betrayed, feature by feature, the description of the robber which had been provided to the

police. The mysterious habits of Phileas Fogg were recalled ; his solitary ways, his sudden departure ; and it seemed clear that, in undertaking a tour round the world on the pretext of a wager, he had had no other end in view than to elude the detectives, and throw them off his track.

CHAPTER VI

IN WHICH FIX, THE DETECTIVE, BETRAYS A VERY
NATURAL IMPATIENCE

The circumstances under which this telegraphic despatch about Phileas Fogg was sent were as follows :

The steamer *Mongolia*, belonging to the Peninsular and Oriental Company, built of iron, of two thousand eight hundred tons burden, and five hundred horse-power, was due at eleven o'clock a.m. on Wednesday, the 9th of October, at Suez. The *Mongolia* plied regularly between Brindisi and Bombay via the Suez Canal, and was one of the fastest steamers belonging to the company, always making more than ten knots an hour between Brindisi and Suez, and nine and a half between Suez and Bombay.

Two men were promenading up and down the wharves, among the crowd of natives and strangers who were sojourning at this once straggling village—now, thanks to the enterprise of M. Lesseps, a fast-growing town. One was the British consul at Suez, who, despite the prophecies of the English Government, and the unfavourable predictions of Stephenson, was in the habit of seeing, from his office window, English ships daily passing to and fro on the great canal, by which the old roundabout route from England to India by the Cape of Good Hope was abridged by at least a half. The other was a small, slight-built personage, with a nervous, intelligent face, and bright eyes peering out from under eyebrows which he was incessantly twitching. He was just now manifesting unmistakable signs

of impatience, nervously pacing up and down, and unable to stand still for a moment. This was Fix, one of the detectives who had been despatched from England in search of the bank robber ; it was his task to narrowly watch every passenger who arrived at Suez, and to follow up all who seemed to be suspicious characters, or bore a resemblance to the description of the criminal, which he had received two days before from the police headquarters at London. The detective was evidently inspired by the hope of obtaining the splendid reward which would be the prize of success, and awaited with a feverish impatience, easy to understand, the arrival of the steamer *Mongolia*.

"So you say, consul," asked he for the twentieth time, "that this steamer is never behind time?"

"No, Mr. Fix," replied the consul. "She was bespoken yesterday at Port Said, and the rest of the way is of no account to such a craft. I repeat that the *Mongolia* has been in advance of the time required by the company's regulations, and gained the prize awarded for excess of speed."

"Does she come directly from Brindisi?"

"Directly from Brindisi ; she takes on the Indian mails there, and she left there Saturday at five p.m. Have patience, Mr. Fix ; she will not be late. But really, I don't see how, from the description you have, you will be able to recognise your man, even if he is on board the *Mongolia*."

"A man rather feels the presence of these fellows, consul, than recognises them. You must have a scent for them, and a scent is like a sixth sense which combines hearing, seeing, and smelling. I've arrested more than one of these gentlemen in my time, and, if my thief is on board, I'll answer for it ; he'll not slip through my fingers."

"I hope so, Mr. Fix, for it was a heavy robbery."

"A magnificent robbery, consul ; fifty-five thousand pounds ! We don't often have such windfalls. Burglars are getting to be so contemptible nowadays ! A fellow gets hung for a handful of shillings !"

"Mr. Fix," said the consul, "I like your way of talking,

and hope you'll succeed ; but I fear you will find it far from easy. Don't you see, the description which you have there has a singular resemblance to an honest man ? ”

“ Consul,” remarked the detective, dogmatically, “ great robbers *always* resemble honest folks. Fellows who have rascally faces have only one course to take, and that is to remain honest ; otherwise they would be arrested off-hand. The artistic thing is, to unmask honest countenances ; it's no light task, I admit, but a real art.”

Mr. Fix evidently was not wanting in a tinge of self-conceit.

Little by little the scene on the quay became more animated ; sailors of various nations, merchants, ship-brokers, porters, fellahs, bustled to and fro as if the steamer were immediately expected. The weather was clear, and slightly chilly. The minarets of the town loomed above the houses in the pale rays of the sun. A jetty pier, some two thousand yards along, extended into the roadstead. A number of fishing-smacks and coasting boats, some retaining the fantastic fashion of ancient galleys, were discernible on the Red Sea.

As he passed among the busy crowd, Fix, according to habit, scrutinised the passers-by with a keen, rapid glance.

It was now half-past ten.

“ The steamer doesn't come ! ” he exclaimed, as the port clock struck.

“ She can't be far off now,” returned his companion.

“ How long will she stop at Suez ? ”

“ Four hours ; long enough to get in her coal. It is thirteen hundred and ten miles from Suez to Aden, at the other end of the Red Sea, and she has to take in a fresh coal supply.”

“ And does she go from Suez directly to Bombay ? ”

“ Without putting in anywhere.”

“ Good ! ” said Fix. “ If the robber is on board he will no doubt get off at Suez, so as to reach the Dutch or French colonies in Asia by some other route. He ought to know

that he would not be safe an hour in India, which is English soil."

"Unless," objected the consul, "he is exceptionally shrewd. An English criminal, you know, is always better concealed in London than anywhere else."

This observation furnished the detective food for thought, and meanwhile the consul went away to his office. Fix, left alone, was more impatient than ever, having a presentiment that the robber was on board the *Mongolia*. If he had indeed left London intending to reach the New World, he would naturally take the route via India, which was less watched and more difficult to watch than that of the Atlantic. But Fix's reflections were soon interrupted by a succession of sharp whistles, which announced the arrival of the *Mongolia*. The porters and fellahs rushed down the quay, and a dozen boats pushed off from the shore to go and meet the steamer. Soon her gigantic hull appeared passing along between the banks, and eleven o'clock struck as she anchored in the road. She brought an unusual number of passengers, some of whom remained on deck to scan the picturesque panorama of the town, while the greater part disembarked in the boats, and landed on the quay.

Fix took up a position, and carefully examined each face and figure which made its appearance. Presently one of the passengers, after vigorously pushing his way through the importunate crowd of porters, came up to him and politely asked if he could point out the English consulate, at the same time showing a passport which he wished to have visaed. Fix instinctively took the passport, and with a rapid glance read the description of its bearer. An involuntary motion of surprise nearly escaped him, for the description in the passport was identical with that of the bank robber which he had received from Scotland Yard.

"Is this your passport?" asked he.

"No, it's my master's."

"And your master is——"

“ He stayed on board.”

“ But he must go to the consul’s in person, so as to establish his identity.”

“ Oh, is that necessary ? ”

“ Quite indispensable.”

“ And where is the consulate ? ”

“ There, on the corner of the square,” said Fix, pointing to a house two hundred steps off.

“ I’ll go and fetch my master, who won’t be much pleased, however, to be disturbed.”

The passenger bowed to Fix, and returned to the steamer.

CHAPTER VII

WHICH ONCE MORE DEMONSTRATES THE USELESSNESS
OF PASSPORTS AS AIDS TO DETECTIVES

THE detective passed down the quay, and rapidly made his way to the consul’s office, where he was at once admitted to the presence of that official.

“ Consul,” said he, without preamble, “ I have strong reasons for believing that my man is a passenger on the *Mongolia*.” And he narrated what had just passed concerning the passport.

“ Well, Mr. Fix,” replied the consul, “ I shall not be sorry to see the rascal’s face ; but perhaps he won’t come here—that is, if he is the person you suppose him to be. A robber doesn’t quite like to leave traces of his flight behind him ; and, besides, he is not obliged to have his passport countersigned.”

“ If he is as shrewd as I think he is, consul, he will come.”

“ To have his passport visaed ? ”

“ Yes. Passports are only good for annoying honest folks, and aiding in the flight of rogues. I assure you it will be quite the thing for him to do ; but I hope you will not visa the passport.”

"Why not? If the passport is genuine I have no right to refuse."

"Still, I must keep this man here until I can get a warrant to arrest him from London."

"Ah, that's your look-out. But I cannot——"

The consul did not finish his sentence, for as he spoke a knock was heard at the door, and two strangers entered, one of whom was the servant whom Fix had met on the quay. The other, who was his master, held out his passport with the request that the consul would do him the favour to visa it. The consul took the document and carefully read it, whilst Fix observed, or rather devoured, the stranger with his eyes from a corner of the room.

"You are Mr. Phileas Fogg?" said the consul, after reading the passport.

"I am."

"And this man is your servant?"

"He is: a Frenchman, named Passepartout."

"You are from London?"

"Yes."

"And you are going——"

"To Bombay."

"Very good, sir. You know that a visa is useless, and that no passport is required?"

"I know it, sir," replied Phileas Fogg; "but I wish to prove, by your visa, that I came by Suez."

"Very well, sir."

The consul proceeded to sign and date the passport, after which he added his official seal. Mr. Fogg paid the customary fee, coldly bowed, and went out, followed by his servant.

"Well?" queried the detective.

"Well, he looks and acts like a perfectly honest man," replied the consul.

"Possibly; but that is not the question. Do you think, consul, that this phlegmatic gentleman resembles, feature by feature, the robber whose description I have received?"

"I concede that ; but then, you know, all descriptions——"

"I'll make certain of it," interrupted Fix. "The servant seems to me less mysterious than the master ; besides, he's a Frenchman, and can't help talking. Excuse me for a little while, consul."

Fix started off in search of Passepartout.

Meanwhile Mr. Fogg, after leaving the consulate, repaired to the quay, gave some orders to Passepartout, went off to the *Mongolia* in a boat, and descended to his cabin. He took up his note-book, which contained the following memoranda :

"Left London, Wednesday, October 2nd, at 8.45 p.m.

"Reached Paris, Thursday, October 3rd, at 7.20 a.m.

"Left Paris, Thursday, at 8.40 a.m.

"Reached Turin by Mont Cenis, Friday, October 4th, at 6.35 a.m.

"Left Turin, Friday, at 7.20 a.m.

"Arrived at Brindisi, Saturday, October 5th, at 4 p.m.

"Sailed on the *Mongolia*, Saturday, at 5 p.m.

"Reached Suez, Wednesday, October 9th, at 11 a.m.

"Total of hours spent, 158 $\frac{1}{2}$; or, in days, six days and a half."

These dates were inscribed in an itinerary divided into columns, indicating the month, the day of the month, and the day for the stipulated and actual arrivals at each principal point—Paris, Brindisi, Suez, Bombay, Calcutta, Singapore, Hong Hong, Yokohama, San Francisco, New York, and London—from the 2nd of October to the 21st of December ; and giving a space for setting down the gain made or the loss suffered on arrival at each locality. This methodical record thus contained an account of everything needed, and Mr. Fogg always knew whether he was behind-hand or in advance of his time. On this Friday, October 9th, he noted his arrival at Suez, and observed that he had as yet neither gained nor lost. He sat down quietly to breakfast in his cabin, never once thinking of

inspecting the town, being one of those Englishmen who are wont to see foreign countries through the eyes of their domestics.

CHAPTER VIII

IN WHICH PASSEPARTOUT TALKS RATHER MORE,
PERHAPS, THAN IS PRUDENT

Fix soon rejoined Passepartout, who was lounging and looking about on the quay, as if he did not feel that he, at least, was obliged not to see anything.

"Well, my friend," said the detective, coming up with him, "is your passport visaed?"

"Ah, it's you, is it, monsieur?" responded Passepartout. "Thanks, yes, the passport is all right."

"And you are looking about you?"

"Yes; but we travel so fast that I seem to be journeying in a dream. So this is Suez?"

"Yes."

"In Egypt?"

"Certainly, in Egypt."

"And in Africa?"

"In Africa."

"In Africa!" repeated Passepartout. "Just think, monsieur, I had no idea that we should go farther than Paris; and all that I saw of Paris was between twenty minutes past seven and twenty minutes before nine in the morning, between the Northern and the Lyons stations, through the windows of a car, and in a driving rain! How I regret not having seen once more Père la Chaise and the circus in the Champs Elysées!"

"You are in a great hurry, then?"

"I am not, but my master is. By the way, I must buy some shoes and shirts. We came away without trunks, only with a carpet-bag."

"I will show you an excellent shop for getting what you want."

"Really, monsieur, you are very kind."

And they walked off together, Passepartout chatting volubly as they went along.

"Above all," said he; "don't let me lose the steamer."

"You have plenty of time; it's only twelve o'clock."

Passepartout pulled out his big watch. "Twelve!" he exclaimed; "why, it's only eight minutes before ten."

"Your watch is slow."

"My watch? A family watch, monsieur, which has come down from my great-grandfather! It doesn't vary five minutes in the year. It's a perfect chronometer, look you."

"I see how it is," said Fix. "You have kept London time, which is two hours behind that of Suez. You ought to regulate your watch at noon in each country."

"I regulate my watch? Never!"

"Well, then, it will not agree with the sun."

"So much the worse for the sun, monsieur. The sun will be wrong, then!"

And the worthy fellow returned the watch to its fob with a defiant gesture. After a few minutes' silence, Fix resumed: "You left London hastily, then?"

"I rather think so! Last Friday at eight o'clock in the evening, Monsieur Fogg came home from his club, and three-quarters of an hour afterwards we were off."

"But where is your master going?"

"Always straight ahead. He is going round the world."

"Round the world?" cried Fix.

"Yes, and in eighty days! He says it is on a wager; but, between us, I don't believe a word of it. That wouldn't be common sense. There's something else in the wind."

"Ah! Mr. Fogg is a character, is he?"

"I should say he was."

"Is he rich?"

"No doubt, for he is carrying an enormous sum in brand-new banknotes with him. And he doesn't spare the money on the way, either : he has offered a large reward to the engineer of the *Mongolia* if he gets us to Bombay well in advance of time."

"And you have known your master a long time?"

"Why, no ; I entered his service the very day we left London."

The effect of these replies upon the already suspicious and excited detective may be imagined. The hasty departure from London soon after the robbery ; the large sum carried by Mr. Fogg ; his eagerness to reach distant countries ; the pretext of an eccentric and foolhardy bet—all confirmed Fix in his theory. He continued to pump poor Passepartout, and learned that he really knew little or nothing of his master, who lived a solitary existence in London, was said to be rich, though no one knew whence came his riches, and was mysterious and impenetrable in his affairs and habits. Fix felt sure that Phileas Fogg would not land at Suez, but was really going on to Bombay.

"Is Bombay far from here?" asked Passepartout.

"Pretty far. It is a ten days' voyage by sea."

"And in what country is Bombay?"

"India."

"In Asia?"

"Certainly."

"The deuce ! I was going to tell you—there's one thing that worries me—my burner !"

"What burner?"

"My gas-burner, which I forgot to turn off, and which is at this moment burning—at my expense. I have calculated, monsieur, that I lose two shillings every four and twenty hours, exactly sixpence more than I earn ; and you will understand that the longer our journey——"

Did Fix pay any attention to Passepartout's trouble about the gas? It is not probable. He was not listening, but was cogitating a project. Passepartout and he had now reached the shop, where Fix left his companion to make his purchases, after recommending him not to miss the steamer, and hurried back to the consulate. Now that he was fully convinced, Fix had quite recovered his equanimity.

"Consul," said he, "I have no longer any doubt. I have spotted my man. He passes himself off as an odd stick who is going round the world in eighty days."

"Then he's a sharp fellow," returned the consul, "and counts on returning to London after putting the police of the two countries off his track."

"We'll see about that," replied Fix.

"But are you not mistaken?"

"I am not mistaken."

"Why was this robber so anxious to prove, by the visa, that he had passed through Suez?"

"Why? I have no idea; but listen to me."

He reported in a few words the most important parts of his conversation with Passepartout.

"In short," said the consul, "appearances are wholly against this man. And what are you going to do?"

"Send a despatch to London for a warrant of arrest to be despatched instantly to Bombay, take passage on board the *Mongolia*, follow my rogue to India, and there, on English ground, arrest him politely, with my warrant in my hand, and my hand on his shoulder."

Having uttered these words with a cool, careless air, the detective took leave of the consul, and repaired to the telegraph office, whence he sent the despatch which we have seen to the London police office. A quarter of an hour later found Fix, with a small bag in his hand, proceeding on board the *Mongolia*; and, ere many moments longer, the noble steamer rode out at full steam upon the waters of the Red Sea.

CHAPTER IX

IN WHICH THE RED SEA AND THE INDIAN OCEAN
PROVE PROPITIOUS TO THE DESIGNS OF PHILEAS
FOGG

THE distance between Suez and Aden is precisely thirteen hundred and ten miles, and the regulations of the company allow the steamers one hundred and thirty-eight hours in which to traverse it. The *Mongolia*, thanks to the vigorous exertions of the engineer, seemed likely, so rapid was her speed, to reach her destination considerably within that time. The greater part of the passengers from Brindisi were bound for India—some for Bombay, others for Calcutta by way of Bombay, the nearest route thither, now that a railway crosses the Indian peninsula. Among the passengers was a number of officials and military officers of various grades, the latter being either attached to the regular British forces or commanding the Sepoy troops, and receiving high salaries ever since the central government has assumed the powers of the East India Company : for the sub-lieutenants get 280*l.*, brigadiers, 2,400*l.*, and generals of divisions, 4,000*l.* What with the military men, a number of rich young Englishmen on their travels, and the hospitable efforts of the purser, the time passed quickly on the *Mongolia*. The best of fare was spread upon the cabin tables at breakfast, lunch, dinner, and the eight o'clock supper, and the ladies scrupulously changed their toilets twice a day ; and the hours were whirled away, when the sea was tranquil, with music, dancing, and games.

But the Red Sea is full of caprice, and often boisterous, like most long and narrow gulfs. When the wind came from the African or Asian coast the *Mongolia*, with her long hull, rolled fearfully. Then the ladies speedily disappeared below ; the pianos were silent ; singing and dancing suddenly ceased. Yet the good ship ploughed straight on, unretarded by wind or wave, towards the straits of Bab-el-Mandeb. What

was Phileas Fogg doing all this time ? It might be thought that, in his anxiety, he would be constantly watching the changes of the wind, the disorderly raging of the billows—every chance, in short, which might force the *Mongolia* to slacken her speed, and thus interrupt his journey. But, if he thought of these possibilities, he did not betray the fact by any outward sign.

Always the same impassible member of the Reform Club, whom no incident could surprise, as unvarying as the ship's chronometers, and seldom having the curiosity even to go upon the deck, he passed through the memorable scenes of the Red Sea with cold indifference ; did not care to recognise the historic towns and villages which, along its borders, raised their picturesque outlines against the sky ; and betrayed no fear of the dangers of the Arabic Gulf, which the old historians always spoke of with horror, and upon which the ancient navigators never ventured without propitiating the gods by ample sacrifices. How did this eccentric personage pass his time on the *Mongolia* ? He made his four hearty meals every day, regardless of the most persistent rolling and pitching on the part of the steamer ; and he played whist indefatigably, for he had found partners as enthusiastic in the game as himself. A tax-collector, on the way to his post at Goa ; the Rev. Decimus Smith, returning to his parish at Bombay ; and a brigadier-general of the English army, who was about to rejoin his brigade at Benares, made up the party, and, with Mr. Fogg, played whist by the hour together in absorbing silence.

As for Passepartout, he, too, had escaped sea-sickness, and took his meals conscientiously in the forward cabin. He rather enjoyed the voyage, for he was well fed and well lodged, took a great interest in the scenes through which they were passing, and consoled himself with the delusion that his master's whim would end at Bombay. He was pleased, on the day after leaving Suez, to find on deck the obliging person with whom he had walked and chatted on the quays.

"If I am not mistaken," said he, approaching this person, with his most amiable smile, "you are the gentleman who so kindly volunteered to guide me at Suez?"

"Ah! I quite recognise you. You are the servant of the strange Englishman——"

"Just so, monsieur——"

"Fix."

"Monsieur Fix," resumed Passepartout, "I'm charmed to find you on board. Where are you bound?"

"Like you, to Bombay."

"That's capital! Have you made this trip before?"

"Several times. I am one of the agents of the Peninsular Company."

"Then you know India?"

"Why—yes," replied Fix, who spoke cautiously.

"A curious place, this India?"

"Oh, very curious. Mosques, minarets, temples, fakirs, pagodas, tigers, snakes, elephants! I hope you will have ample time to see the sights."

"I hope so, Monsieur Fix. You see, a man of sound sense ought not to spend his life jumping from a steamer upon a railway train, and from a railway train upon a steamer again, pretending to make the tour of the world in eighty days! No; all these gymnastics, you may be sure, will cease at Bombay."

"And Mr. Fogg is getting on well?" asked Fix, in the most natural tone in the world.

"Quite well, and I too. I eat like a famished ogre; it's the sea air."

"But I never see your master on deck."

"Never; he hasn't the least curiosity."

"Do you know, Mr. Passepartout, that this pretended tour in eighty days may conceal some secret errand—perhaps a diplomatic mission?"

"Faith, Monsieur Fix, I assure you I know nothing about it, nor would I give half a crown to find out."

After this meeting, Passepartout and Fix got into the

habit of chatting together, the latter making it a point to gain the worthy man's confidence. He frequently offered him a glass of whiskey or pale ale in the steamer bar-room, which Passepartout never failed to accept with graceful alacrity, mentally pronouncing Fix the best of good fellows.

Meanwhile the *Mongolia* was pushing forward rapidly ; on the 13th, Mocha, surrounded by its ruined walls whereon date-trees were growing, was sighted, and on the mountains beyond were espied vast coffee-fields. Passepartout was ravished to behold this celebrated place, and thought that, with its circular walls and dismantled fort, it looked like an immense coffee-cup and saucer. The following night they passed through the Strait of Bab-el-Mandeb, which means in Arabic The Bridge of Tears, and the next day they put in at Steamer Point, north-west of Aden harbour, to take in coal. This matter of fuelling steamers is a serious one at such distances from the coal-mines ; it costs the Peninsular Company some eight hundred thousand pounds a year. In these distant seas, coal is worth three or four pounds sterling a ton.

The *Mongolia* had still sixteen hundred and fifty miles to traverse before reaching Bombay, and was obliged to remain four hours at Steamer Point to coal up. But this delay, as it was foreseen, did not affect Phileas Fogg's programme ; besides, the *Mongolia*, instead of reaching Aden on the morning of the 15th, when she was due, arrived there on the evening of the 14th, a gain of fifteen hours.

Mr. Fogg and his servant went ashore at Aden to have the passport again visaed ; Fix, unobserved, followed them. The visa procured, Mr. Fogg returned on board to resume his former habits ; while Passepartout, according to custom, sauntered about among the mixed population of Somanlis, Banyans, Parsees, Jews, Arabs, and Europeans who comprise the twenty-five thousand inhabitants of Aden. He gazed with wonder upon the fortifications which make

this place the Gibraltar of the Indian Ocean, and the vast cisterns where the English engineers were still at work, two thousand years after the engineers of Solomon.

"Very curious, *very* curious," said Passepartout to himself, on returning to the steamer. "I see that it is by no means useless to travel, if a man wants to see something new." At six p.m. the *Mongolia* slowly moved out of the roadstead, and was soon once more on the Indian Ocean. She had a hundred and sixty-eight hours in which to reach Bombay, and the sea was favourable, the wind being in the north-west, and all sails aiding the engine. The steamer rolled but little, the ladies, in fresh toilets, reappeared on deck, and the singing and dancing were resumed. The trip was being accomplished most successfully, and Passepartout was enchanted with the congenial companion which chance had secured him in the person of the delightful Fix. On Sunday, October 20th, towards noon, they came in sight of the Indian coast: two hours later the pilot came on board. A range of hills lay against the sky in the horizon, and soon the rows of palms which adorn Bombay came distinctly into view. The steamer entered the road formed by the islands in the bay, and at half-past four she hauled up at the quays of Bombay.

Phileas Fogg was in the act of finishing the thirty-third rubber of the voyage, and his partner and himself having, by a bold stroke, captured all thirteen of the tricks, concluded this fine campaign with a brilliant victory.

The *Mongolia* was due at Bombay on the 22nd; she arrived on the 20th. This was a gain to Phileas Fogg of two days since his departure from London, and he calmly entered the fact in the itinerary, in the column of gains.

CHAPTER X

IN WHICH PASSEPARTOUT IS ONLY TOO GLAD TO
GET OFF WITH THE LOSS OF HIS SHOES

Everybody knows that the great reversed triangle of land, with its base in the north and its apex in the south, which is called India, embraces fourteen hundred thousand square miles, upon which is spread unequally a population of one hundred and eighty millions of souls. The British Crown exercises a real and despotic dominion over the larger portion of this vast country, and has a governor-general stationed at Calcutta, governors at Madras, Bombay, and in Bengal, and a lieutenant-governor at Agra.

But British India, properly so called, only embraces seven hundred thousand square miles, and a population of from one hundred to one hundred and ten millions of inhabitants. A considerable portion of India is still free from British authority ; and there are certain ferocious rajahs in the interior who are absolutely independent. The celebrated East India Company was all-powerful from 1756, when the English first gained a foothold on the spot where now stands the city of Madras, down to the time of the great Sepoy insurrection. It gradually annexed province after province, purchasing them of the native chiefs, whom it seldom paid, and appointed the governor-general and his subordinates, civil and military. But the East India Company has now passed away, leaving the British possessions in India directly under the control of the Crown. The aspect of the country, as well as the manners and distinctions of race, is daily changing.

Formerly one was obliged to travel in India by the old cumbrous methods of going on foot or on horseback, in palanquins or unwieldy coaches ; now fast steamboats ply on the Indus and the Ganges, and a great railway, with branch lines joining the main line at many points on its route, traverses the peninsula from Bombay to Calcutta in

three days. This railway does not run in a direct line across India. The distance between Bombay and Calcutta, as the bird flies, is only from one thousand to eleven hundred miles ; but the deflections of the road increase this distance by more than a third.

The general route of the Great Indian Peninsula Railway is as follows : Leaving Bombay, it passes through Salcette, crossing to the continent opposite Tannah, goes over the chain of the Western Ghauts, runs thence north-east as far as Burhampoor, skirts the nearly independent territory of Bundelcund, ascends to Allahabad, turns thence eastwardly, meeting the Ganges at Benares, then departs from the river a little, and, descending south-eastward by Burdivan and the French town of Chandernagor, has its terminus at Calcutta.

The passengers of the *Mongolia* went ashore at half-past four p.m. ; at exactly eight the train would start for Calcutta.

Mr. Fogg, after bidding good-bye to his whist partners, left the steamer, gave his servant several errands to do, urged it upon him to be at the station promptly at eight, and, with his regular step, which beat to the second, like an astronomical clock, directed his steps to the passport office. As for the wonders of Bombay—its famous city hall, its splendid library, its forts and docks, its bazaars, mosques, synagogues, its Armenian churches, and the noble pagoda on Malabar Hill, with its two polygonal towers—he cared not a straw to see them. He would not deign to examine even the masterpieces of Elephanta, or the mysterious hypogea, concealed south-east from the docks, or those fine remains of Buddhist architecture, the Kanherian grottoes of the island of Salcette.

Having transacted his business at the passport office, Phileas Fogg repaired quietly to the railway station, where he ordered dinner. Among the dishes served up to him, the landlord especially recommended a certain gilet of “ native rabbit,” on which he prided himself.

Mr. Fogg accordingly tasted the dish, but, despite its spiced sauce, found it far from palatable. He rang for the

landlord, and, on his appearance, said, fixing his clear eyes upon him, "Is this rabbit, sir?"

"Yes, my lord," the rogue boldly replied, "rabbit from the jungles."

"And this rabbit did not mew when he was killed?"

"Mew, my lord! What, a rabbit mew! I swear to you——"

"Be so good, landlord, as not to swear, but remember this: cats were formerly considered, in India, as sacred animals. That was a good time."

"For the cats, my lord?"

"Perhaps for the travellers as well!"

After which Mr. Fogg quietly continued his dinner. Fix had gone on shore shortly after Mr. Fogg, and his first destination was the headquarters of the Bombay police. He made himself known as a London detective, told his business at Bombay, and the position of affairs relative to the supposed robber, and nervously asked if a warrant had arrived from London. It had not reached the office; indeed, there had not yet been time for it to arrive. Fix was sorely disappointed, and tried to obtain an order of arrest from the director of the Bombay police. This the director refused, as the matter concerned the London office, which alone could legally deliver the warrant. Fix did not insist, and was fain to resign himself to await the arrival of the important document; but he was determined not to lose sight of the mysterious rogue as long as he stayed in Bombay. He did not doubt for a moment, any more than Passepartout, that Phileas Fogg would remain there, at least until it was time for the warrant to arrive.

Passepartout, however, had no sooner heard his master's orders on leaving the *Mongolia* than he saw at once that they were to leave Bombay as they had done Suez and Paris, and that the journey would be extended at least as far as Calcutta, and perhaps beyond that place. He began to ask himself if this bet that Mr. Fogg talked about was not really in good earnest, and whether his fate was not in truth

forcing him, despite his love of repose, around the world in eighty days !

Having purchased the usual quota of shirts and shoes, he took a leisurely promenade about the streets, where crowds of people of many nationalities—Europeans, Persians with pointed caps, Banyas with round turbans, Sindes with square bonnets, Parsees with black mitres, and long-robed Armenians—were collected. It happened to be the day of a Parsee festival. These descendants of the sect of Zoroaster—the most thrifty, civilised, intelligent, and austere of the East Indians, among whom are counted the richest native merchants of Bombay—were celebrating a sort of religious carnival, with processions and shows, in the midst of which Indian dancing-girls, clothed in rose-coloured gauze, looped up with gold and silver, danced airily, but with perfect modesty, to the sound of viols and the clanging of tambourines. It is needless to say that Passepartout watched these curious ceremonies with staring eyes and gaping mouth, and that his countenance was that of the greenest booby imaginable.

Unhappily for his master, as well as himself, his curiosity drew him unconsciously farther off than he intended to go. At last, having seen the Parsee carnival wind away in the distance, he was turning his steps towards the station, when he happened to espy the splendid pagoda on Malabar Hill, and was seized with an irresistible desire to see its interior. He was quite ignorant that it is forbidden to Christians to enter certain Indian temples, and that even the faithful must not go in without first leaving their shoes outside the door. It may be said here that the wise policy of the British Government severely punishes a disregard of the practices of the native religions.

Passepartout, however, thinking no harm, went in like a simple tourist, and was soon lost in admiration of the splendid Brahmin ornamentation which everywhere met his eyes, when of a sudden he found himself sprawling on the sacred flagging. He looked up to behold three enraged

priests, who forthwith fell upon him, tore off his shoes, and began to beat him with loud, savage exclamations. The agile Frenchman was soon upon his feet again, and lost no time in knocking down two of his long-gowned adversaries with his fists and a vigorous application of his toes ; then, rushing out of the pagoda as fast as his legs could carry him, he soon escaped the third priest by mingling with the crowd in the streets.

At five minutes before eight, Passepartout, hatless, shoeless, and having in the squabble lost his package of shirts and shoes, rushed breathlessly into the station.

Fix, who had followed Mr. Fogg to the station, and saw that he was really going to leave Bombay, was there, upon the platform. He had resolved to follow the supposed robber to Calcutta, and farther, if necessary. Passepartout did not observe the detective, who stood in an obscure corner ; but Fix heard him relate his adventures in a few words to Mr. Fogg.

“ I hope that this will not happen again,” said Phileas Fogg coldly, as he got into the train. Poor Passepartout, quite crestfallen, followed his master without a word. Fix was on the point of entering another carriage, when an idea struck him which induced him to alter his plan.

“ No, I’ll stay,” muttered he. “ An offence has been committed on Indian soil. I’ve got my man.”

Just then the locomotive gave a sharp screech, and the train passed out into the darkness of the night.

CHAPTER XI

IN WHICH PHILEAS FOGG SECURES A CURIOUS MEANS OF
CONVEYANCE AT A FABULOUS PRICE

The train had started punctually. Among the passengers were a number of officers, Government officials, and opium and indigo merchants, whose business called them to the

eastern coast. Passepartout rode in the same carriage with his master, and a third passenger occupied a seat opposite to them. This was Sir Francis Cromarty, one of Mr. Fogg's whist partners on the *Mongolia*, now on his way to join his corps at Benares. Sir Francis was a tall, fair man of fifty, who had greatly distinguished himself in the last Sepoy revolt. He made India his home, only paying brief visits to England at rare intervals ; and was almost as familiar as a native with the customs, history, and character of India and its people. But Phileas Fogg, who was not travelling, but only describing a circumference, took no pains to inquire into these subjects ; he was a solid body, traversing an orbit around the terrestrial globe, according to the laws of rational mechanics. He was at this moment calculating in his mind the number of hours spent since his departure from London, and, had it been in his nature to make a useless demonstration, would have rubbed his hands for satisfaction. Sir Francis Cromarty had observed the oddity of his travelling companion—although the only opportunity he had for studying him had been while he was dealing the cards, and between two rubbers—and questioned himself whether a human heart really beat beneath this cold exterior, and whether Phileas Fogg had any sense of the beauties of nature. The brigadier-general was free to mentally confess that, of all the eccentric persons he had ever met, none was comparable to this product of the exact sciences.

Phileas Fogg had not concealed from Sir Francis his design of going round the world, nor the circumstances under which he set out ; and the general only saw in the wager a useless eccentricity and a lack of sound common-sense. In the way this strange gentleman was going on, he would leave the world without having done any good to himself or anybody else.

An hour after leaving Bombay the train had passed the viaducts and the Island of Salcette, and had got into the open country. At Callyan they reached the junction of the branch line which descends towards south-eastern India

by Kandallah and Pounah ; and, passing Pauwell, they entered the defiles of the mountains, with their basalt bases, and their summits crowned with thick and verdant forests. Phileas Fogg and Sir Francis Cromarty exchanged a few words from time to time, and now Sir Francis, reviving the conversation, observed, "Some years ago, Mr. Fogg, you would have met with a delay at this point which would probably have lost you your wager."

"How so, Sir Francis ?"

"Because the railway stopped at the base of these mountains, which the passengers were obliged to cross in palanquins or on ponies to Kandallah, on the other side."

"Such a delay would not have deranged my plans in the least," said Mr. Fogg. "I have constantly foreseen the likelihood of certain obstacles."

"But, Mr. Fogg," pursued Sir Francis, "you run the risk of having some difficulty about this worthy fellow's adventure at the pagoda." Passepartout, his feet comfortably wrapped in his travelling-blanket, was sound asleep and did not dream that anybody was talking about him. "The Government is very severe upon that kind of offence. It takes particular care that the religious customs of the Indians should be respected, and if your servant were caught——"

"Very well, Sir Francis," replied Mr. Fogg ; "if he had been caught he would have been condemned and punished, and then would have quietly returned to Europe. I don't see how this affair could have delayed his master."

The conversation fell again. During the night the train left the mountains behind, and passed Nassik, and the next day proceeded over the flat, well-cultivated country of the Khandeish, with its straggling villages, above which rose the minarets of the pagodas. This fertile territory is watered by numerous small rivers and limpid streams, mostly tributaries of the Godavery.

Passepartout, on waking and looking out, could not realise that he was actually crossing India in a railway train.

The locomotive, guided by an English engineer and fed with English coal, threw out its smoke upon cotton, coffee, nutmeg, clove, and pepper plantations, while the steam curled in spirals around groups of palm-trees, in the midst of which were seen picturesque bungalows, viharis (a sort of abandoned monasteries), and marvellous temples enriched by the exhaustless ornamentation of Indian architecture. Then they came upon vast tracts extending to the horizon, with jungles inhabited by snakes and tigers, which fled at the noise of the train ; succeeded by forests penetrated by the railway, and still haunted by elephants which, with pensive eyes, gazed at the train as it passed. The travellers crossed, beyond Milligaum, the fatal country so often stained with blood by the sectaries of the goddess Kali. Not far off rose Ellora, with its graceful pagodas, and the famous Aurungabad, capital of the ferocious Aureng-Zeb, now the chief town of one of the detached provinces of the kingdom of the Nizam. It was thereabouts that Feringhea, the Thuggee chief, king of the stranglers, held his sway. These ruffians, united by a secret bond, strangled victims of every age in honour of the goddess Death, without ever shedding blood ; there was a period when this part of the country could scarcely be travelled over without corpses being found in every direction. The English Government has succeeded in greatly diminishing these murders, though the Thuggees still exist, and pursue the exercise of their horrible rites.

At half-past twelve the train stopped at Burhampoor where Passepartout was able to purchase some Indian slippers, ornamented with false pearls, in which, with evident vanity, he proceeded to encase his feet. The travellers made a hasty breakfast and started off for Assurgur, after skirting for a little the banks of the small river Tapy, which empties into the Gulf of Cambray, near Surat.

Passepartout was now plunged into absorbing reverie. Up to his arrival at Bombay, he had entertained hopes that their journey would end there ; but, now that they were

plainly whirling across India at full speed, a sudden change had come over the spirit of his dreams. His old vagabond nature returned to him ; the fantastic ideas of his youth once more took possession of him. He came to regard his master's project as intended in good earnest, believed in the reality of the bet, and therefore in the tour of the world and the necessity of making it without fail within the designated period. Already he began to worry about possible delays, and accidents which might happen on the way. He recognised himself as being personally interested in the wager, and trembled at the thought that he might have been the means of losing it by his unpardonable folly of the night before. Being much less cool-headed than Mr. Fogg, he was much more restless, counting and recounting the days passed over, uttering maledictions when the train stopped, and accusing it of sluggishness, and mentally blaming Mr. Fogg for not having bribed the engineer. The worthy fellow was ignorant that, while it was possible by such means to hasten the rate of a steamer, it could not be done on the railway.

The train entered the defiles of the Sutpour Mountains, which separate the Khandeish from Bundelcund, towards evening. The next day Sir Francis Cromarty asked Passepartout what time it was ; to which, on consulting his watch, he replied that it was three in the morning. This famous timepiece, always regulated on the Greenwich meridian, which was now some seventy-seven degrees westward, was at least four hours slow. Sir Francis corrected Passepartout's time, whereupon the latter made the same remark that he had done to F'ix ; and upon the general insisting that the watch should be regulated in each new meridian, since he was constantly going eastward, that is in the face of the sun, and therefore the days were shorter by four minutes for each degree gone over, Passepartout obstinately refused to alter his watch, which he kept at London time. It was an innocent delusion which could harm no one.

The train stopped, at eight o'clock, in the midst of a

glade some fifteen miles beyond Rothal, where there were several bungalows, and workmen's cabins. The conductor, passing along the carriages, shouted, "Passengers will get out here!"

Phileas Fogg looked at Sir Francis Cromarty for an explanation; but the general could not tell what meant a halt in the midst of this forest of dates and acacias.

Passepartout, not less surprised, rushed out and speedily returned, crying: "Monsieur, no more railway!"

"What do you mean?" asked Sir Francis.

"I mean to say that the train isn't going on."

The general at once stepped out, while Phileas Fogg calmly followed him, and they proceeded together to the conductor.

"Where are we?" asked Sir Francis.

"At the hamlet of Kholby."

"Do we stop here?"

"Certainly. The railway isn't finished."

"What! not finished?"

"No. There's still a matter of fifty miles to be laid from here to Allahabad, where the line begins again."

"But the papers announced the opening of the railway throughout."

"What would you have, officer? The papers were mistaken."

"Yet you sell tickets from Bombay to Calcutta," retorted Sir Francis, who was growing warm.

"No doubt," replied the conductor; "but the passengers know that they must provide means of transportation for themselves from Kholby to Allahabad."

Sir Francis was furious. Passepartout would willingly have knocked the conductor down, and did not dare to look at his master.

"Sir Francis," said Mr. Fogg quietly, "we will, if you please, look about for some means of conveyance to Allahabad."

"Mr. Fogg, this is a delay greatly to your disadvantage."

"No, Sir Francis ; it was foreseen."

"What ! You knew that the way——"

"Not at all ; but I knew that some obstacle or other would sooner or later arise on my route. Nothing, therefore, is lost. I have two days, which I have already gained, to sacrifice. A steamer leaves Calcutta for Hong Kong at noon, on the 25th. This is the 22nd, and we shall reach Calcutta in time."

There was nothing to say to so confident a response.

It was but too true that the railway came to a termination at this point. The papers were like some watches, which have a way of getting too fast, and had been premature in their announcement of the completion of the line. The greater part of the travellers were aware of this interruption, and, leaving the train, they began to engage such vehicles as the village could provide—four-wheeled palkigharis, waggons drawn by zebus, carriages that looked like perambulating pagodas, palanquins, ponies, and what not.

Mr. Fogg and Sir Francis Cromarty, after searching the village from end to end, came back without having found anything.

"I shall go afoot," said Phileas Fogg.

Passepartout, who had now rejoined his master, made a wry grimace, as he thought of his magnificent, but too frail Indian shoes. Happily he too had been looking about him, and, after a moment's hesitation, said, "Monsieur, I think I have found a means of conveyance."

"What ?"

"An elephant ! An elephant that belongs to an Indian who lives but a hundred steps from here."

"Let's go and see the elephant," replied Mr. Fogg.

They soon reached a small hut, near which, enclosed within some high palings, was the animal in question. An Indian came out of the hut, and, at their request, conducted them within the enclosure. The elephant, which its owner had reared, not for a beast of burden, but for warlike purposes, was half domesticated. The Indian had

begun already, by often irritating him, and feeding him every three months on sugar and butter, to impart to him a ferocity not in his nature, this method being often employed by those who train the Indian elephants for battle. Happily, however, for Mr. Fogg, the animal's instruction in this direction had not gone far, and the elephant still preserved his natural gentleness. Kiouni—this was the name of the beast—could doubtless travel rapidly for a long time, and, in default of any other means of conveyance, Mr. Fogg resolved to hire him. But elephants are far from cheap in India, where they are becoming scarce, the males, which alone are suitable for circus shows, are much sought, especially as but few of them are domesticated. When therefore Mr. Fogg proposed to the Indian to hire Kiouni, he refused point-blank. Mr. Fogg persisted, offering the excessive sum of ten pounds an hour for the loan of the beast to Allahabad. Refused. Twenty pounds? Refused also. Forty pounds? Still refused. Passepartout jumped at each advance; but the Indian declined to be tempted. Yet the offer was an alluring one, for, supposing it took the elephant fifteen hours to reach Allahabad, his owner would receive no less than six hundred pounds sterling.

Phileas Fogg, without getting in the least flurried, then proposed to purchase the animal outright, and at first offered a thousand pounds for him. The Indian, perhaps thinking he was going to make a great bargain, still refused.

Sir Francis Cromarty took Mr. Fogg aside, and begged him to reflect before he went any further; to which that gentleman replied that he was not in the habit of acting rashly, that a bet of twenty thousand pounds was at stake, that the elephant was absolutely necessary to him, and that he would secure him if he had to pay twenty times his value. Returning to the Indian, whose small, sharp eyes, glistening with avarice, betrayed that with him it was only a question of how great a price he could obtain. Mr. Fogg offered first twelve hundred, then fifteen hundred, eighteen

hundred, two thousand pounds. Passepartout, usually so rubicund, was fairly white with suspense.

At two thousand pounds the Indian yielded.

“What a price, good heavens !” cried Passepartout, “for an elephant !”

It only remained now to find a guide, which was comparatively easy. A young Parsee, with an intelligent face, offered his services, which Mr. Fogg accepted, promising so generous a reward as to materially stimulate his zeal. The elephant was led out and equipped. The Parsee, who was an accomplished elephant driver, covered his back with a sort of saddle-cloth, and attached to each of his flanks some curiously uncomfortable howdahs.

Phileas Fogg paid the Indian with some banknotes which he extracted from the famous carpet-bag, a proceeding that seemed to deprive poor Passepartout of his vitals. Then he offered to carry Sir Francis to Allahabad, which the brigadier gratefully accepted, as one traveller the more would not be likely to fatigue the gigantic beast. Provisions were purchased at Kholby, and, while Sir Francis and Mr. Fogg took the howdahs on either side, Passepartout got astride the saddle-cloth between them. The Parsee perched himself on the elephant's neck, and at nine o'clock they set out from the village, the animal marching off through the dense forest of palms by the shortest cut.

CHAPTER XII

IN WHICH PHILEAS FOGG AND HIS COMPANIONS
VENTURE ACROSS THE INDIAN FORESTS, AND WHAT
ENSUED.

In order to shorten the journey, the guide passed to the left of the line where the railway was still in process of being built. This line, owing to the capricious turnings of the Vindhia Mountains, did not pursue a straight course. The

Parsee, who was quite familiar with the roads and paths in the district, declared that they would gain twenty miles by striking directly through the forest.

Phileas Fogg and Sir Francis Cromarty, plunged to the neck in the peculiar howdahs provided for them, were horribly jostled by the swift trotting of the elephant, spurred on as he was by the skilful Parsee ; but they endured the discomfort with true British phlegm, talking little, and scarcely able to catch a glimpse of each other. As for Passepartout, who was mounted on the beast's back, and received the direct force of each concussion as he trod along, he was very careful, in accordance with his master's advice, to keep his tongue from between his teeth, as it would otherwise have been bitten off short. The worthy fellow bounced from the elephant's neck to his rump, and vaulted like a clown on a spring-board ; yet he laughed in the midst of his bouncing, and from time to time took a piece of sugar out of his pocket, and inserted it in Kiouni's trunk, who received it without in the least slackening his regular trot.

After two hours the guide stopped the elephant, and gave him an hour for rest, during which Kiouni, after quenching his thirst at a neighbouring spring, set to devouring the branches and shrubs round about him. Neither Sir Francis nor Mr. Fogg regretted the delay, and both descended with a feeling of relief. " Why, he's made of iron ! " exclaimed the general, gazing admiringly on Kiouni.

" Of forged iron," replied Passepartout, as he set about preparing a hasty breakfast.

At noon the Parsee gave the signal of departure. The country soon presented a very savage aspect. Copses of dates and dwarf-palms succeeded the dense forests ; then vast, dry plains, dotted with scanty shrubs, and sown with great blocks of syenite. All this portion of Bundelcund, which is little frequented by travellers, is inhabited by a fanatical population, hardened in the most horrible practices of the Hindoo faith. The English have not been able to secure complete dominion over this territory, which is

subjected to the influence of rajahs, whom it is almost impossible to reach in their inaccessible mountain fastnesses. The travellers several times saw bands of ferocious Indians, who, when they perceived the elephant striding across-country, made angry and threatening motions. The Parsee avoided them as much as possible. Few animals were observed on the route ; even the monkeys hurried from their path with contortions and grimaces which convulsed Passepartout with laughter.

In the midst of his gaiety, however, one thought troubled the worthy servant. What would Mr. Fogg do with the elephant when he got to Allahabad ? Would he carry him on with him ? Impossible ! The cost of transporting him would make him ruinously expensive. Would he sell him, or set him free ? The estimable beast certainly deserved some consideration. Should Mr. Fogg choose to make him, Passepartout, a present of Kiouni, he would be very much embarrassed ; and these thoughts did not cease worrying him for a long time.

The principal chain of the Vindhias was crossed by eight in the evening, and another halt was made on the northern slope, in a ruined bungalow. They had gone nearly twenty-five miles that day, and an equal distance still separated them from the station of Allahabad.

The night was cold. The Parsee lit a fire in the bungalow with a few dry branches, and the warmth was very grateful, provisions purchased at Kholby sufficed for supper, and the travellers ate ravenously. The conversation, beginning with a few disconnected phrases, soon gave place to loud and steady snores. The guide watched Kiouni, who slept standing, bolstering himself against the trunk of a large tree. Nothing occurred during the night to disturb the slumberers, although occasional growls from panthers and chatterings of monkeys broke the silence ; the more formidable beasts made no cries or hostile demonstration against the occupants of the bungalow. Sir Francis slept heavily, like an honest soldier overcome with fatigue. Passepartout was

wrapped in uneasy dreams of the bouncing of the day before. As for Mr. Fogg, he slumbered as peacefully as if he had been in his serene mansion in Saville Row.

The journey was resumed at six in the morning ; the guide hoped to reach Allahabad by evening. In that case, Mr. Fogg would only lose a part of the forty-eight hours saved since the beginning of the tour. Kiouni, resuming his rapid gait, soon descended the lower spurs of the Vindhias, and towards noon they passed by the village of Kallenger, on the Cani, one of the branches of the Ganges. The guide avoided inhabited places, thinking it safer to keep the open country, which lies along the first depressions of the basin of the great river. Allahabad was now only twelve miles to the north-east. They stopped under a clump of bananas, the fruit of which, as healthy as bread and as succulent as cream, was amply partaken of and appreciated.

At two o'clock the guide entered a thick forest which extended several miles ; he preferred to travel under cover of the woods. They had not as yet had any unpleasant encounters, and the journey seemed on the point of being successfully accomplished, when the elephant, becoming restless, suddenly stopped.

It was then four o'clock.

"What's the matter?" asked Sir Francis, putting out his head.

"I don't know, officer," replied the Parsee, listening attentively to a confused murmur which came through the thick branches.

The murmur soon became more distinct ; it now seemed like a distant concert of human voices accompanied by brass instruments. Passepartout was all eyes and ears. Mr. Fogg patiently waited without a word. The Parsee jumped to the ground, fastened the elephant to a tree, and plunged into the thicket. He soon returned, saying :

"A procession of Brahmins is coming this way. We must prevent their seeing us, if possible."

The guide unloosed the elephant and led him into a

thicket, at the same time asking the travellers not to stir. He held himself ready to bestride the animal at a moment's notice, should flight become necessary ; but he evidently thought that the procession of the faithful would pass without perceiving them amid the thick foliage, in which they were wholly concealed.

The discordant tones of the voices and instruments drew nearer, and now droning songs mingled with the sound of the tambourines and cymbals. The head of the procession soon appeared beneath the trees, a hundred paces away ; and the strange figures who performed the religious ceremony were easily distinguished through the branches. First came the priests, with mitres on their heads, and clothed in long lace robes. They were surrounded by men, women, and children, who sang a kind of lugubrious psalm, interrupted at regular intervals by the tambourines and cymbals ; while behind them was drawn a car with large wheels, the spokes of which represented serpents entwined with each other. Upon the car, which was drawn by four richly caparisoned zebus, stood a hideous statue with four arms, the body coloured a dull red, with haggard eyes, dishevelled hair, protruding tongue, and lips tinted with betel. It stood upright upon the figure of a prostrate and headless giant.

Sir Francis, recognising the statue, whispered, " The goddess Kali ; the goddess of love and death."

" Of death, perhaps," muttered back Passepartout, " but of love—that ugly old hag ? Never ! "

The Parsee made a motion to keep silence.

A group of old fakirs were capering and making a wild ado round the statue ; these were striped with ochre, and covered with cuts whence their blood issued drop by drop—stupid fanatics, who, in the great Indian ceremonies, still throw themselves under the wheels of Juggernaut. Some Brahmins, clad in all the sumptuousness of Oriental apparel, and leading a woman who faltered at every step, followed. This woman was young, and as fair as a European. Her

head and neck, shoulders, ears, arms, hands, and toes were loaded down with jewels and gems—with bracelets, earrings, and rings; while a tunic bordered with gold, and covered with a light muslin robe, betrayed the outline of her form.

The guards who followed the young woman presented a violent contrast to her, armed as they were with naked sabres hung at their waists, and long damascened pistols, and bearing a corpse on a palanquin. It was the body of an old man, gorgeously arrayed in the habiliments of a rajah, wearing, as in life, a turban embroidered with pearls, a robe of tissue of silk and gold, a scarf of cashmere sewed with diamonds, and the magnificent weapons of a Hindoo prince. Next came the musicians and a rearguard of capering fakirs, whose cries sometimes drowned the noise of the instruments; these closed the procession.

Sir Francis watched the procession with a sad countenance, and, turning to the guide, said, "A suttee."

The Parsee nodded, and put his finger to his lips. The procession slowly wound under the trees, and soon its last ranks disappeared in the depths of the wood. The songs gradually died away; occasionally cries were heard in the distance, until at last all was silence again.

Phileas Fogg had heard what Sir Francis said, and, as soon as the procession had disappeared, asked: "What is a suttee?"

"A suttee," returned the general, "is a human sacrifice, but a voluntary one. The woman you have just seen will be burned to-morrow at the dawn of day."

"Oh, the scoundrels!" cried Passepartout, who could not repress his indignation.

"And the corpse?" asked Mr. Fogg.

"Is that of the prince, her husband," said the guide; "an independent rajah of Bundelcund."

"Is it possible," resumed Phileas Fogg, his voice betraying not the least emotion, "that these barbarous customs still exist in India, and that the English have been unable to put a stop to them?"

“ These sacrifices do not occur in the larger portion of India,” replied Sir Francis ; “ but we have no power over these savage territories, and especially here in Bundelcund. The whole district north of the Vindhias is the theatre of incessant murders and pillage.”

“ The poor wretch ! ” exclaimed Passepartout, “ to be burned alive ! ”

“ Yes,” returned Sir Francis, “ burned alive. And, if she were not, you cannot conceive what treatment she would be obliged to submit to from her relatives. They would shave off her hair, feed her on a scanty allowance of rice, treat her with contempt ; she would be looked upon as an unclean creature, and would die in some corner, like a scurvy dog. The prospect of so frightful an existence drives these poor creatures to the sacrifice much more than love or religious fanaticism. Sometimes, however, the sacrifice is really voluntary, and it requires the active interference of the Government to prevent it. Several years ago, when I was living at Bombay, a young widow asked permission of the governor to be burned along with her husband’s body ; but, as you may imagine, he refused. The woman left the town, took refuge with an independent rajah, and there carried out her self-devoted purpose.”

While Sir Francis was speaking, the guide shook his head several times, and now said : “ The sacrifice which will take place to-morrow at dawn is not a voluntary one.”

“ How do you know ? ”

“ Everybody knows about this affair in Bundelcund.”

“ But the wretched creature did not seem to be making any resistance,” observed Sir Francis.

“ That was because they had intoxicated her with fumes of hemp and opium.”

“ But where are they taking her ? ”

“ To the pagoda of Pillaji, two miles from here ; she will pass the night there.”

“ And the sacrifice will take place——”

“ To-morrow, at the first light of dawn.”

The guide now led the elephant out of the thicket, and leaped upon his neck. Just at the moment that he was about to urge Kiouni forward with a peculiar whistle, Mr. Fogg stopped him, and, turning to Sir Francis Cromarty, said, "Suppose we save this woman."

"Save the woman, Mr. Fogg!"

"I have yet twelve hours to spare; I can devote them to that."

"Why, you are a man of heart!"

"Sometimes," replied Phileas Fogg, quietly; "when I have the time."

CHAPTER XIII

IN WHICH PASSEPARTOUT RECEIVES A NEW PROOF
THAT FORTUNE FAVOURS THE BRAVE

The project was a bold one, full of difficulty, perhaps impracticable. Mr. Fogg was going to risk life, or at least liberty, and therefore the success of his tour. But he did not hesitate, and he found in Sir Francis Cromarty an enthusiastic ally.

As for Passepartout, he was ready for anything that might be proposed. His master's idea charmed him; he perceived a heart, a soul, under that icy exterior. He began to love Phileas Fogg.

There remained the guide: what course would he adopt? Would he not take part with the Indians? In default of his assistance, it was necessary to be assured of his neutrality.

Sir Francis frankly put the question to him.

"Officers," replied the guide, "I am a Parsee, and this woman is a Parsee. Command me as you will."

"Excellent!" said Mr. Fogg.

"However," resumed the guide, "it is certain, not only that we shall risk our lives, but horrible tortures, if we are taken."

“That is foreseen,” replied Mr. Fogg. “I think we must wait till night before acting.”

“I think so,” said the guide.

The worthy Indian then gave some account of the victim, who, he said, was a celebrated beauty of the Parsee race, and the daughter of a wealthy Bombay merchant. She had received a thoroughly English education in that city, and, from her manners and intelligence, would be thought an European. Her name was Aouda. Left an orphan, she was married against her will to the old rajah of Bundelcund ; and, knowing the fate that awaited her, she escaped, was retaken, and devoted by the rajah’s relatives, who had an interest in her death, to the sacrifice from which it seemed she could not escape.

The Parsee’s narrative only confirmed Mr. Fogg and his companions in their generous design. It was decided that the guide should direct the elephant towards the pagoda of Pillaji, which he accordingly approached as quickly as possible. They halted, half an hour afterwards, in a copse, some five hundred feet from the pagoda, where they were well concealed ; but they could hear the groans and cries of the fakirs distinctly.

They then discussed the means of getting at the victim. The guide was familiar with the pagoda of Pillaji, in which, as he declared, the young woman was imprisoned. Could they enter any of its doors while the whole party of Indians was plunged in a drunken sleep, or was it safer to attempt to make a hole in the walls ? This could only be determined at the moment and the place themselves ; but it was certain that the abduction must be made that night, and not when, at break of day, the victim was led to her funeral pyre. Then no human intervention could save her.

As soon as night fell, about six o’clock, they decided to make a reconnaissance around the pagoda. The cries of the fakirs were just ceasing ; the Indians were in the act of plunging themselves into the drunkenness caused by liquid

opium mingled with hemp, and it might be possible to slip between them to the temple itself.

The Parsee, leading the others, noiselessly crept through the wood, and in ten minutes they found themselves on the banks of a small stream, whence, by the light of the rosin torches, they perceived a pyre of wood, on the top of which lay the embalmed body of the rajah, which was to be burned with his wife. The pagoda, whose minarets loomed above the trees in the deepening dusk, stood a hundred steps away.

"Come!" whispered the guide.

He slipped more cautiously than ever through the brush, followed by his companions; the silence around was only broken by the low murmuring of the wind among the branches.

Soon the Parsee stopped on the borders of the glade, which was lit up by the torches. The ground was covered by groups of the Indians, motionless in their drunken sleep; it seemed a battlefield strewn with the dead. Men, women, and children lay together.

In the background, among the trees, the pagoda of Pillaji loomed distinctly. Much to the guide's disappointment, the guards of the rajah, lighted by torches, were watching at the doors and marching to and fro with naked sabres; probably the priests, too, were watching within.

The Parsee, now convinced that it was impossible to force an entrance to the temple, advanced no farther, but led his companions back again. Phileas Fogg and Sir Francis Cromarty also saw that nothing could be attempted in that direction. They stopped, and engaged in a whispered colloquy.

"It is only eight now," said the brigadier, "and these guards may also go to sleep."

"It is not impossible," returned the Parsee.

They lay down at the foot of a tree, and waited.

The time seemed long; the guide ever and anon left them to take an observation on the edge of the wood, but the

guards watched steadily by the glare of the torches, and a dim light crept through the windows of the pagoda.

They waited till midnight ; but no change took place among the guards, and it became apparent that their yielding to sleep could not be counted on. The other plan must be carried out ; an opening in the walls of the pagoda must be made. It remained to ascertain whether the priests were watching by the side of their victim as assiduously as were the soldiers at the door.

After a last consultation, the guide announced that he was ready for the attempt, and advanced, followed by the others. They took a roundabout way, so as to get at the pagoda on the rear. They reached the walls about half-past twelve, without having met anyone ; here there was no guard, nor were there either windows or doors.

The night was dark. The moon, on the wane, scarcely left the horizon, and was covered with heavy clouds ; the height of the trees deepened the darkness.

It was not enough to reach the walls ; an opening in them must be accomplished, and to attain this purpose the party only had their pocket-knives. Happily the temple walls were built of brick and wood, which could be penetrated with little difficulty ; after one brick had been taken out, the rest would yield easily.

They set noiselessly to work, and the Parsee on one side and Passepartout on the other began to loosen the bricks so as to make an aperture two feet wide. They were getting on rapidly, when suddenly a cry was heard in the interior of the temple, followed almost instantly by other cries replying from the outside. Passepartout and the guide stopped. Had they been heard ? Was the alarm being given ? Common prudence urged them to retire, and they did so, followed by Phileas Fogg and Sir Francis. They again hid themselves in the wood, and waited till the disturbance, whatever it might be, ceased, holding themselves ready to resume their attempt without delay. But, awkwardly enough, the guards now appeared at the rear of the temple,

and there installed themselves, in readiness to prevent a surprise.

It would be difficult to describe the disappointment of the party, thus interrupted in their work. They could not now reach the victim ; how, then, could they save her ? Sir Francis shook his fists, Passepartout was beside himself, and the guide gnashed his teeth with rage. The tranquil Fogg waited, without betraying any emotion.

"We have nothing to do but to go away," whispered Sir Francis.

"Nothing but to go away," echoed the guide.

"Stop," said Fogg. "I am only due at Allahabad to-morrow before noon."

"But what can you hope to do ?" asked Sir Francis. "In a few hours it will be daylight, and——"

"The chance which now seems lost may present itself at the last moment."

Sir Francis would have liked to read Phileas Fogg's eyes.

What was this cool Englishman thinking of ? Was he planning to make a rush for the young woman at the very moment of the sacrifice, and boldly snatch her from her executioners ?

This would be utter folly, and it was hard to admit that Fogg was such a fool. Sir Francis consented, however, to remain to the end of this terrible drama. The guide led them to the rear of the glade, where they were able to observe the sleeping groups.

Meanwhile Passepartout, who had perched himself on the lower branches of a tree, was resolving an idea which had at first struck him like a flash, and which was now firmly lodged in his brain.

He had commenced by saying to himself, "What folly !" and then he repeated, "Why not, after all ? It's a chance—perhaps the only one ; and with such sots !" Thinking thus, he slipped, with the suppleness of a serpent, to the lowest branches, the ends of which bent almost to the ground.

The hours passed, and the lighter shades now announced the approach of day, though it was not yet light. This was the moment. The slumbering multitude became animated, the tambourines sounded, songs and cries arose ; the hour of the sacrifice had come. The doors of the pagoda swung open, and a bright light escaped from its interior, in the midst of which Mr. Fogg and Sir Francis espied the victim. She seemed, having shaken off the stupor of intoxication, to be striving to escape from her executioner. Sir Francis's heart throbbed ; and, convulsively seizing Mr. Fogg's hand, found in it an open knife. Just at this moment the crowd began to move. The young woman had again fallen into a stupor caused by the fumes of hemp, and passed among the fakirs, who escorted her with their wild, religious cries.

Phileas Fogg and his companions, mingling in the rear ranks of the crowd, followed ; and in two minutes they reached the banks of the stream, and stopped fifty paces from the pyre, upon which still lay the rajah's corpse. In the semi-obscurity they saw the victim, quite senseless, stretched out beside her husband's body. Then a torch was brought, and the wood, soaked with oil, instantly took fire.

At this moment Sir Francis and the guide seized Phileas Fogg, who, in an instant of mad generosity, was about to rush upon the pyre. But he had quickly pushed them aside, when the whole scene suddenly changed. A cry of terror arose. The whole multitude prostrated themselves, terror-stricken, on the ground.

The old rajah was not dead, then, since he rose of a sudden, like a spectre, took up his wife in his arms, and descended from the pyre in the midst of the clouds of smoke, which only heightened his ghostly appearance.

Fakirs and soldiers and priests, seized with instant terror, lay there, with their faces on the ground, not daring to lift their eyes and behold such a prodigy.

The inanimate victim was borne along by the vigorous arms which supported her, and which she did not seem in the least to burden. Mr. Fogg and Sir Francis stood erect,

the Parsee bowed his head, and Passepartout was, no doubt, scarcely less stupefied.

The resuscitated rajah approached Sir Francis and Mr. Fogg, and, in an abrupt tone, said, "Let us be off!"

It was Passepartout himself, who had slipped upon the pyre in the midst of the smoke and, profiting by the still overhanging darkness, had delivered the young woman from death! It was Passepartout who, playing his part with a happy audacity, had passed through the crowd amid the general terror.

A moment after all four of the party had disappeared in the woods, and the elephant was bearing them away at a rapid pace. But the cries and noise, and a ball which whizzed through Phileas Fogg's hat, apprised them that the trick had been discovered.

The old rajah's body, indeed, now appeared upon the burning pyre; and the priests, recovered from their terror, perceived that an abduction had taken place. They hastened into the forest, followed by the soldiers, who fired a volley after the fugitives; but the latter rapidly increased the distance between them, and ere long found themselves beyond the reach of the bullets and arrows.

CHAPTER XIV

IN WHICH PHILEAS FOGG DESCENDS THE WHOLE LENGTH OF THE BEAUTIFUL VALLEY OF THE GANGES WITHOUT EVER THINKING OF SEEING IT

THE rash exploit had been accomplished; and for an hour Passepartout laughed gaily at his success. Sir Francis pressed the worthy fellow's hand, and his master said, "Well done!" which, from him, was high commendation; to which Passepartout replied that all the credit of the affair belonged to Mr. Fogg. As for him, he had only been struck with a "queer" idea; and he laughed to think that for

a few moments he, Passepartout, the ex-gymnast, ex-sergeant fireman, had been the spouse of a charming woman, a venerable, embalmed rajah ! As for the young Indian woman, she had been unconscious throughout of what was passing, and now, wrapped up in a travelling-blanket, was reposing in one of the howdahs.

The elephant, thanks to the skilful guidance of the Parsee, was advancing rapidly through the still darksome forest, and, an hour after leaving the pagoda, had crossed a vast plain. They made a halt at seven o'clock, the young woman being still in a state of complete prostration. The guide made her drink a little brandy and water, but the drowsiness which stupefied her could not yet be shaken off. Sir Francis, who was familiar with the effects of the intoxication produced by the fumes of hemp, reassured his companions on her account. But he was more disturbed at the prospect of her future fate. He told Phileas Fogg that, should Aouda remain in India, she would inevitably fall again into the hands of her executioners. These fanatics were scattered throughout the country, and would, despite the English police, recover their victim at Madras, Bombay, or Calcutta. She would only be safe by quitting India for ever.

Phileas Fogg replied that he would reflect upon the matter.

The station at Allahabad was reached about ten o'clock, and, the interrupted line of railway being resumed, would enable them to reach Calcutta in less than twenty-four hours. Phileas Fogg would thus be able to arrive in time to take the steamer which left Calcutta the next day, October 25th, at noon, for Hong Kong.

The young woman was placed in one of the waiting-rooms of the station, whilst Passepartout was charged with purchasing for her various articles of toilet, a dress, shawl, and some furs ; for which his master gave him unlimited credit. Passepartout started off forthwith, and found himself in the streets of Allahabad, that is, the City of God,

one of the most venerated in India, being built at the junction of the two sacred rivers, Ganges and Jumna, the waters of which attract pilgrims from every part of the peninsula. The Ganges, according to the legends of the Ramayana, rises in heaven, whence, owing to Brahma's agency, it descends to the earth.

Passepartout made it a point, as he made his purchases, to take a good look at the city. It was formerly defended by a noble fort, which has since become a state prison ; its commerce has dwindled away, and Passepartout in vain looked about him for such a bazaar as he used to frequent in Regent Street. At last he came upon an elderly, crusty Jew, who sold second-hand articles, and from whom he purchased a dress of Scotch stuff, a large mantle, and a fine otter-skin pelisse, for which he did not hesitate to pay seventy-five pounds. He then returned triumphantly to the station.

The influence to which the priests of Pillaji had subjected Aouda began gradually to yield, and she became more herself, so that her fine eyes resumed all their soft Indian expression.

When the poet-king, Ucaf Uddaul, celebrates the charms of the queen of Ahmehnagara, he speaks thus :

“ Her shining tresses, divided in two parts, encircle the harmonious contour of her white and delicate cheeks, brilliant in their glow and freshness. Her ebony brows have the form and charm of the bow of Kama, the god of love, and beneath her long silken lashes the purest reflections and a celestial light swim, as in the sacred lakes of Himalaya, in the black pupils of her great clear eyes. Her teeth, fine, equal, and white, glitter between her smiling lips like dewdrops in a passion-flower's half-enveloped breast. Her delicately formed ears, her vermilion hands, her little feet, curved and tender as the lotus-bud, glitter with the brilliancy of the loveliest pearls of Ceylon, the most dazzling diamonds of Golconda. Her narrow and supple waist, which a hand may clasp around, sets forth

the outline of her rounded figure and the beauty of her bosom, where youth in its flower displays the wealth of its treasures ; and beneath the silken folds of her tunic she seems to have been modelled in pure silver by the godlike hand of Vicvarcarma, the immortal sculptor."

It is enough to say, without applying this poetical rhapsody to Aouda, that she was a charming woman, in all the European acceptation of the phrase. She spoke English with great purity, and the guide had not exaggerated in saying that the young Parsee had been transformed by her bringing up.

The train was about to start from Allahabad, and Mr. Fogg proceeded to pay the guide the price agreed upon for his service, and not a farthing more ; which astonished Passepartout, who remembered all that his master owed to the guide's devotion. He had, indeed, risked his life in the adventure at Pillaji, and, if he should be caught afterwards by the Indians, he would with difficulty escape their vengeance. Kiouni, also, must be disposed of. What should be done with the elephant, which had been so dearly purchased ? Phileas Fogg had already determined this question.

"Parsec," said he to the guide, "you have been serviceable and devoted. I have paid for your service, but not for your devotion. Would you like to have this elephant ? He is yours."

The guide's eyes glistened.

"Your honour is giving me a fortune !" cried he.

"Take him, guide," returned Mr. Fogg, "and I shall still be your debtor."

"Good !" exclaimed Passepartout. "Take him, friend. Kiouni is a brave and faithful beast." And, going up to the elephant, he gave him several lumps of sugar, saying, "Here, Kiouni, here, here."

The elephant grunted out his satisfaction, and, clasping Passepartout around the waist with his trunk, lifted him as high as his head. Passepartout, not in the least alarmed,

caressed the animal, which replaced him gently on the ground.

Soon after, Phileas Fogg, Sir Francis Cromarty, and Passepartout, installed in a carriage with Aouda, who had the best seat, were whirling at full speed towards Benares. It was a run of eighty miles, and was accomplished in two hours. During the journey, the young woman fully recovered her senses. What was her astonishment to find herself in this carriage, on the railway, dressed in European habiliments, and with travellers who were quite strangers to her ! Her companions first set about fully reviving her with a little liquor, and then Sir Frances narrated to her what had passed, dwelling upon the courage with which Phileas Fogg had not hesitated to risk his life to save her, and recounting the happy sequel of the venture, the result of Passepartout's rash idea. Mr. Fogg said nothing ; while Passepartout, abashed, kept repeating that "it wasn't worth telling."

Aouda pathetically thanked her deliverers, rather with tears than words ; her fine eyes interpreted her gratitude better than her lips. Then, as her thoughts strayed back to the scene of the sacrifice, and recalled the dangers which still menaced her, she shuddered with terror.

Phileas Fogg understood what was passing in Aouda's mind, and offered, in order to reassure her, to escort her to Hong Kong, where she might remain safely until the affair was hushed up—an offer which she eagerly and gratefully accepted. She had, it seems, a Parsee relation, who was one of the principal merchants of Hong Kong, which is wholly an English city, though on an island on the Chinese coast.

At half-past twelve the train stopped at Benares. The Brahmin legends assert that this city is built on the site of the ancient Cusi, which, like Mahomet's tomb, was once suspended between heaven and earth ; though the Benares of to-day, which the Orientalists call the Athens of India, stands quite unpoetically on the solid earth, Passepartout

caught glimpses of its brick houses and clay huts, giving an aspect of desolation to the place, as the train entered it.

Benares was Sir Francis Cromarty's destination, the troops he was rejoining being encamped some miles northward of the city. He bade adieu to Phileas Fogg, wishing him all success, and expressing the hope that he would come that way again in a less original but more profitable fashion. Mr. Fogg lightly pressed him by the hand. The parting of Aouda, who did not forget what she owed to Sir Francis, betrayed more warmth ; and, as for Passepartout, he received a hearty shake of the hand from the gallant general.

The railway, on leaving Benares, passed for a while along the valley of the Ganges. Through the windows of their carriage the travellers had glimpses of the diversified landscape of Behar, with its mountains clothed in verdure, its fields of barley, wheat, and corn, its jungles peopled with green alligators, its neat villages, and its still thickly-leaved forests. Elephants were bathing in the waters of the sacred river, and groups of Indians, despite the advanced season and chilly air, were performing solemnly their pious ablutions. These were fervent Brahmins, the bitterest foes of Buddhism, their deities being Vishnu, the solar god, Shiva, the divine impersonation of natural forces, and Brahma, the supreme ruler of priests and legislators. What would these divinities think of India, anglicised as it is to-day, with steamers whistling and scudding along the Ganges, frightening the gulls which float upon its surface, the turtles swarming along its banks, and the faithful dwelling upon its borders ?

The panorama passed before their eyes like a flash, save when the steam concealed it fitfully from the view : the travellers could scarcely discern the fort of Chupenie, twenty miles south-westward from Benares, the ancient stronghold of the rajahs of Behar ; or Ghazipur and its famous rose-water factories ; or the tomb of Lord Cornwallis, rising on the left bank of the Ganges ; the fortified town of Buxar, or

Patna, a large manufacturing and trading-place, where is held the principal opium market of India ; or Monghir, a more than European town, for it is as English as Manchester or Birmingham, with its iron foundries, edge-tool factories, and high chimneys puffing clouds of black smoke heavenward.

Night came on ; the train passed on at full speed, in the midst of the roaring of the tigers, bears, and wolves which fled before the locomotive ; and the marvels of Bengal, Golconda, ruined Gour, Murshedabad, the ancient capital, Burdwan, Hugly, and the French town of Chandernagor, where Passepartout would have been proud to see his country's flag flying, were hidden from their view in the darkness.

Calcutta was reached at seven in the morning, and the packet left for Hong Kong at noon ; so that Phileas Fogg had five hours before him.

According to his journal, he was due at Calcutta on the 25th of October, and that was the exact date of his actual arrival. He was therefore neither behind-hand nor ahead of time. The two days gained between London and Bombay had been lost, as has been seen, in the journey across India. But it is not to be supposed that Phileas Fogg regretted them.

CHAPTER XV

IN WHICH THE BAG OF BANKNOTES DISGORGES SOME
THOUSANDS OF POUNDS MORE

THE train entered the station, and Passepartout, jumping out first, was followed by Mr. Fogg, who assisted his fair companion to descend. Phileas Fogg intended to proceed at once to the Hong Kong steamer, in order to get Aouda comfortably settled for the voyage. He was unwilling to leave her while they were still on dangerous ground.

Just as he was leaving the station a policeman came up to him, and said, "Mr. Phileas Fogg?"

"I am he."

"Is this man your servant?" added the policeman, pointing to Passepartout.

"Yes."

"Be so good, both of you, as to follow me."

Mr. Fogg betrayed no surprise whatever. The policeman was a representative of the law, and law is sacred to an Englishman. Passepartout tried to reason about the matter, but the policeman tapped him with his stick, and Mr. Fogg made him a signal to obey.

"May this young lady go with us?" asked he.

"She may," replied the policeman.

Mr. Fogg, Aouda, and Passepartout were conducted to a palkigahri, a sort of four-wheeled carriage, drawn by two horses, in which they took their places and were driven away. No one spoke during the twenty minutes which elapsed before they reached their destination. They first passed through the "black town," with its narrow streets, its miserable, dirty huts, and squalid population; then through the "European town," which presented a relief in its bright brick mansions, shaded by coconut-trees and bristling with masts, where, although it was early morning, elegantly dressed horsemen and handsome equipages were passing back and forth.

The carriage stopped before a modest-looking house, which, however, did not have the appearance of a private mansion. The policeman having requested his prisoners—for so, truly, they might be called—to descend, conducted them into a room with barred windows, and said: "You will appear before Judge Obadiah at half-past eight."

He then retired, and closed the door.

"Why, we are prisoners!" exclaimed Passepartout, falling into a chair.

Aouda, with an emotion she tried to conceal, said to Mr. Fogg: "Sir, you must leave me to my fate! It is on

my account that you receive this treatment, it is for having saved me ! ”

Phileas Fogg contended himself with saying that it was impossible. It was quite unlikely that he should be arrested for preventing a suttee. The complainants would not dare present themselves with such a charge. There was some mistake. Moreover, he would not, in any event, abandon Aouda, but would escort her to Hong Kong.

“ But the steamer leaves at noon ! ” observed Passepartout, nervously.

“ We shall be on board by noon,” replied his master, placidly.

It was said so positively that Passepartout could not help muttering to himself, “ *Parbleu* that’s certain ! Before noon we shall be on board.” But he was by no means reassured.

At half-past eight the door opened, the policeman appeared, and, requesting them to follow him, led the way to an adjoining hall. It was evidently a court-room, and a crowd of Europeans and natives already occupied the rear of the apartment.

Mr. Fogg and his two companions took their places on a bench opposite the desks of the magistrate and his clerk. Immediately after, Judge Obadiah, a fat, round man, followed by the clerk, entered. He proceeded to take down a wig which was hanging on a nail, and put it hurriedly on his head.

“ The first case,” said he. Then, putting his hand to his head, he exclaimed, “ Heh ! This is not my wig ! ”

“ No, your worship,” returned the clerk, “ it is mine.”

“ My dear Mr. Oysterpuff, how can a judge give a wise sentence in a clerk’s wig ? ”

The wigs were exchanged.

Passepartout was getting nervous, for the hands on the face of the big clock over the judge seemed to go round with terrible rapidity.

“ The first case,” repeated Judge Obadiah.

"Phileas Fogg?" demanded Oysterpuff.

"I am here," replied Mr. Fogg.

"Passepartout?"

"Present," responded Passepartout.

"Good," said the judge. "You have been looked for, prisoners, for two days on the trains from Bombay."

"But of what are we accused?" asked Passepartout, impatiently.

"You are about to be informed."

"I am an English subject, sir," said Mr. Fogg, "and I have the right——"

"Have you been ill-treated?"

"Not at all."

"Very well; let the complainants come in."

A door was swung open by order of the judge, and three Indian priests entered.

"That's it," muttered Passepartout; "these are the rogues who were going to burn our young lady."

The priests took their places in front of the judge, and the clerk proceeded to read in a loud voice a complaint of sacrilege against Phileas Fogg and his servant, who were accused of having violated a place held consecrated by the Brahmin religion.

"You hear the charge?" asked the judge.

"Yes, sir," replied Mr. Fogg, consulting his watch, "and I admit it."

"You admit it?"

"I admit it, and I wish to hear these priests admit, in their turn, what they were going to do at the pagoda of Pillaji."

The priests looked at each other; they did not seem to understand what was said.

"Yes," cried Passepartout, warmly; "at the pagoda of Pillaji, where they were on the point of burning their victim."

The judge stared with astonishment, and the priests were stupefied.

“What victim?” said Judge Obadiah. “Burn whom? In Bombay itself?”

“Bombay?” cried Passepartout.

“Certainly. We are not talking of the pagoda of Pillaji, but of the pagoda of Malabar Hill, at Bombay.”

“And as a proof,” added the clerk, “here are the desecrator’s very shoes, which he left behind him.”

Whereupon he placed a pair of shoes on his desk.

“My shoes!” cried Passepartout, in his surprise permitting this imprudent exclamation to escape him.

The confusion of master and man, who had quite forgotten the affair at Bombay, for which they were now detained at Calcutta, may be imagined.

Fix, the detective, had foreseen the advantage which Passepartout’s escapade gave him, and, delaying his departure for twelve hours, had consulted the priests of Malabar Hill. Knowing that the English authorities dealt very severely with this kind of misdemeanour, he promised them a goodly sum in damages, and sent them forward to Calcutta by the next train. Owing to the delay caused by the rescue of the young widow, Fix and the priests reached the Indian capital before Mr. Fogg and his servant, the magistrates having been already warned by a despatch to arrest them should they arrive. Fix’s disappointment when he learned that Phileas Fogg had not made his appearance in Calcutta may be imagined. He made up his mind that the robber had stopped somewhere on the route and taken refuge in the southern provinces. For twenty-four hours Fix watched the station with feverish anxiety; at last he was rewarded by seeing Mr. Fogg and Passepartout arrive, accompanied by a young woman, whose presence he was wholly at a loss to explain. He hastened for a policeman; and this was how the party came to be arrested and brought before Judge Obadiah.

Had Passepartout been a little less preoccupied, he would have espied the detective ensconced in a corner of the court-room, watching the proceedings with an interest

easily understood ; for the warrant had failed to reach him at Calcutta, as it had done at Bombay and Suez.

Judge Obadiah had unfortunately caught Passepartout's rash exclamation, which the poor fellow would have given the world to recall.

"The facts are admitted ?" asked the judge.

"Admitted," replied Mr. Fogg, coldly.

"Inasmuch," resumed the judge, "as the English law protects equally and sternly the religions of the Indian people, and as the man Passepartout has admitted that he violated the sacred pagoda of Malabar Hill, at Bombay, on the 20th of October, I condemn the said Passepartout to imprisonment for fifteen days and a fine of three hundred pounds."

"Three hundred pounds !" cried Passepartout, startled at the largeness of the sum.

"Silence !" shouted the constable.

"And inasmuch," continued the judge, "as it is not proved that the act was not done by the connivance of the master with the servant, and as the master in any case must be held responsible for the acts of his paid servant, I condemn Phileas Fogg to a week's imprisonment and a fine of one hundred and fifty pounds."

Fix rubbed his hands softly with satisfaction ; if Phileas Fogg could be detained in Calcutta a week, it would be more than time for the warrant to arrive. Passepartout was stupefied. This sentence ruined his master. A wager of twenty thousand pounds lost, because he, like a precious fool, had gone into that abominable pagoda !

Phileas Fogg, as self-composed as if the judgment did not in the least concern him, did not even lift his eyebrows while it was being pronounced. Just as the clerk was calling the next case, he rose, and said, "I offer bail."

"You have that right," returned the judge.

Fix's blood ran cold, but he resumed his composure when he heard the judge announce that the bail required for each prisoner would be one thousand pounds.

"I will pay it at once," said Mr. Fogg, taking a roll of bank-bills from the carpet-bag, which Passepartout had by him, and placing them on the clerk's desk.

"This sum will be restored to you upon your release from prison," said the judge. "Meanwhile, you are liberated on bail."

"Come!" said Phileas Fogg to his servant.

"But let them at least give me back my shoes!" cried Passepartout angrily.

"Ah, these are pretty dear shoes!" he muttered, as they were handed to him. "More than a thousand pounds apiece; besides, they pinch my feet."

Mr. Fogg, offering his arm to Aouda, then departed, followed by the crestfallen Passepartout, Fix still nourished hopes that the robber would not, after all, leave the two thousand pounds behind him, but would decide to serve out his week in jail, and issued forth on Mr. Fogg's traces. That gentleman took a carriage, and the party were soon landed on one of the quays.

The *Rangoon* was moored half a mile off in the harbour, its signal of departure hoisted at the mast-head. Eleven o'clock was striking; Mr. Fogg was an hour in advance of time. Fix saw them leave the carriage and push off in a boat for the steamer, and stamped his feet with disappointment.

"The rascal is off, after all!" he exclaimed. "Two thousand pounds sacrificed! He's as prodigal as a thief! I'll follow him to the end of the world if necessary; but, at the rate he is going on, the stolen money will soon be exhausted."

The detective was not far wrong in making this conjecture. Since leaving London, what with travelling expenses, bribes, the purchase of the elephant, bails, and fines, Mr. Fogg had already spent more than five thousand pounds on the way, and the percentage of the sum recovered from the bank robber, promised to the detectives, was rapidly diminishing.

CHAPTER XVI

IN WHICH FIX DOES NOT SEEM TO UNDERSTAND
IN THE LEAST WHAT IS SAID TO HIM

The *Rangoon*—one of the Peninsular and Oriental Company's boats plying in the Chinese and Japanese seas—was a screw steamer, built of iron, weighing about seventeen hundred and seventy tons, and with engines of four hundred horse-power. She was as fast, but not as well fitted up, as the *Mongolia*, and Aouda was not as comfortably provided for on board of her as Phileas Fogg could have wished. However, the trip from Calcutta to Hong Kong only comprised some three thousand five hundred miles, occupying from ten to twelve days, and the young woman was not difficult to please.

During the first days of the journey Aouda became better acquainted with her protector, and constantly gave evidence of her deep gratitude for what he had done. The phlegmatic gentleman listened to her, apparently at least, with coldness, neither his voice nor his manner betraying the slightest emotion ; but he seemed to be always on the watch that nothing should be wanting to Aouda's comfort. He visited her regularly each day at certain hours, not so much to talk himself, as to sit and hear her talk. He treated her with the strictest politeness, but with the precision of an automaton, the movements of which had been arranged for this purpose. Aouda did not quite know what to make of him, though Passepartout had given her some hints of his master's eccentricity, and made her smile by telling her of the wager which was sending him round the world. After all, she owed Phileas Fogg her life, and she always regarded him through the exalting medium of her gratitude.

Aouda confirmed the Parsee guide's narrative of her touching history. She did, indeed, belong to the highest of the native races of India. Many of the Parsee merchants

have made great fortunes there by dealing in cotton ; and one of them, Sir Jametsee Jeejeebhoy, was made a baronet by the English government. Aouda was a relative of this great man, and it was his cousin, Jeejeeh, whom she hoped to join at Hong Kong. Whether she would find a protector in him she could not tell ; but Mr. Fogg essayed to calm her anxieties, and to assure her that everything would be mathematically—he used the very word—arranged. Aouda fastened her great eyes, “ clear as the sacred lakes of the Himalaya,” upon him ; but the intractable Fogg, as reserved as ever, did not seem at all inclined to throw himself into this lake.

The first few days of the voyage passed prosperously, amid favourable weather and propitious winds, and they soon came in sight of the great Andaman, the principal of the islands in the Bay of Bengal, with its picturesque Saddle Peak, two thousand four hundred feet high, looming above the waters. The steamer passed along near the shores, but the savage Papuans, who are in the lowest scale of humanity, but are not, as has been asserted, cannibals, did not make their appearance.

The panorama of the islands, as they steamed by them, was superb. Vast forests of palms, arecs, bamboo, teak-wood, of the gigantic mimosa, and tree-like ferns covered the foreground, while behind, the graceful outlines of the mountains were traced against the sky ; and along the coasts swarmed by thousands the precious swallows whose nests furnish a luxurious dish to the tables of the Celestial Empire. The varied landscape afforded by the Andaman Islands was soon passed, however, and the *Rangoon* rapidly approached the Straits of Malacca, which gave access to the China seas.

What was detective Fix, so unluckily drawn on from country to country, doing all this while. He had managed to embark on the *Rangoon* at Calcutta without being seen by Passepartout, after leaving orders that, if the warrant should arrive, it should be forwarded to him at Hong

Kong ; and he hoped to conceal his presence to the end of the voyage. It would have been difficult to explain why he was on board without awakening Passepartout's suspicions, who thought him still at Bombay. But necessity impelled him, nevertheless, to renew his acquaintance with the worthy servant, as will be seen.

All the detective's hopes and wishes were now centred on Hong Kong ; for the steamer's stay at Singapore would be too brief to enable him to take any steps there. The arrest must be made at Hong Kong, or the robber would probably escape him for ever. Hong Kong was the last English ground on which he would set foot ; beyond, China, Japan, America offered to Fogg an almost certain refuge. If the warrant should at last make its appearance at Hong Kong, Fix could arrest him and give him into the hands of the local police, and there would be no further trouble. But beyond Hong Kong, a simple warrant would be of no avail ; an extradition warrant would be necessary, and that would result in delays and obstacles, of which the rascal would take advantage to elude justice.

Fix thought over these probabilities during the long hours which he spent in his cabin, and kept repeating to himself, " Now, either the warrant will be at Hong Kong, in which case I shall arrest my man, or it will not be there ; and this time it is absolutely necessary that I should delay his departure. I have failed at Bombay, and I have failed at Calcutta : if I fail at Hong Kong, my reputation is lost. Cost what it may, I *must* succeed ! But how shall I prevent his departure, if that should turn out to be my last resource ? "

Fix made up his mind that, if worst came to worst, he would make a confidant of Passepartout, and tell him what kind of a fellow his master really was. That Passepartout was not Fogg's accomplice, he was very certain. The servant, enlightened by his disclosure, and afraid of being himself implicated in the crime, would doubtless become an ally of the detective. But this method was a

dangerous one, only to be employed when everything else had failed. A word from Passepartout to his master would ruin all. The detective was therefore in a sore strait. But suddenly a new idea struck him. The presence of Aouda on the *Rangoon*, in company with Phileas Fogg, gave him new material for reflection.

Who was this woman ? What combination of events had made her Fogg's travelling companion ? They had evidently met somewhere between Bombay and Calcutta ; but where ? Had they met accidentally, or had Fogg gone into the interior purposely in quest of this charming damsel ? Fix was fairly puzzled. He asked himself whether there had not been a wicked elopement ; and this idea so impressed itself upon his mind that he determined to make use of the supposed intrigue. Whether the young woman were married or not, he would be able to create such difficulties for Mr. Fogg at Hong Kong that he could not escape by paying any amount of money.

But could he even wait till they reached Hong Kong ? Fogg had an abominable way of jumping from one boat to another, and, before anything could be effected, might get full under weigh again for Yokohama.

Fix decided that he must warn the English authorities, and signal the *Rangoon* before her arrival. This was easy to do, since the steamer stopped at Singapore, whence there is a telegraphic wire to Hong Kong. He finally resolved, moreover, before acting more positively, to question Passepartout. It would not be difficult to make him talk ; and, as there was no time to lose, Fix prepared to make himself known.

It was now the 30th of October, and on the following day the *Rangoon* was due at Singapore.

Fix emerged from his cabin and went on deck. Passepartout was promenading up and down in the forward part of the steamer. The detective rushed forward with every appearance of extreme surprise, and exclaimed, " You here, on the *Rangoon* ? "

"What, Monsieur Fix, are you on board?" returned the really astonished Passepartout, recognising his crony of the *Mongolia*. "Why, I left you at Bombay, and here you are, on the way to Hong Kong! Are you going round the world too?"

"No, no," replied Fix; "I shall stop at Hong Kong—at least for some days."

"Hum!" said Passepartout, who seemed for an instant perplexed. "But how is it I have not seen you on board since we left Calcutta?"

"Oh, a trifle of sea-sickness—I've been staying in my berth. The Gulf of Bengal does not agree with me as well as the Indian Ocean. And how is Mr. Fogg?"

"As well and as punctual as ever, not a day behind time! But, Monsieur Fix, you don't know that we have a young lady with us."

"A young lady?" replied the detective, not seeming to comprehend what was said.

Passepartout thereupon recounted Aouda's history, the affair at the Bombay pagoda, the purchase of the elephant for two thousand pounds, the rescue, the arrest, and sentence of the Calcutta court, and the restoration of Mr. Fogg and himself to liberty on bail. Fix, who was familiar with the last events, seemed to be equally ignorant of all that Passepartout related; and the latter was charmed to find so interested a listener.

"But does your master propose to carry this young woman to Europe?"

"Not at all. We are simply going to place her under the protection of one of her relatives, a rich merchant at Hong Kong."

"Nothing to be done there," said Fix to himself, concealing his disappointment. "A glass of gin, Mr. Passepartout?"

"Willingly, Monsieur Fix. We must at least have a friendly glass on board the *Rangoon*."

CHAPTER XVII

SHOWING WHAT HAPPENED ON THE VOYAGE FROM
SINGAPORE TO HONG KONG

THE detective and Passepartout met often on deck after this interview, though Fix was reserved, and did not attempt to induce his companion to divulge any more facts concerning Mr. Fogg. He caught a glimpse of that mysterious gentleman once or twice ; but Mr. Fogg usually confined himself to the cabin, where he kept Aouda company, or, according to his inveterate habit, took a hand at whist.

Passepartout began very seriously to conjecture what strange chance kept Fix still on the route that his master was pursuing. It was really worth considering why this certainly very amiable and complacent person, whom he had first met at Suez, had then encountered on board the *Mongolia*, who disembarked at Bombay, which he announced as his destination, and now turned up so unexpectedly on the *Rangoon*, was following Mr. Fogg's tracks step by step. What was Fix's object ? Passepartout was ready to wager his Indian shoes—which he religiously preserved—that Fix would also leave Hong Kong at the same time with them, and probably on the same steamer.

Passepartout might have cudgelled his brain for a century without hitting upon the real object which the detective had in view. He never could have imagined that Phileas Fogg was being tracked as a robber around the globe. But, as it is in human nature to attempt the solution of every mystery, Passepartout suddenly discovered an explanation of Fix's movements, which was in truth far from unreasonable. Fix, he thought, could only be an agent of Mr. Fogg's friends at the Reform Club, sent to follow him up, and to ascertain that he really went round the world as had been agreed upon.

"It's clear !" repeated the worthy servant to himself, proud of his shrewdness. "He's a spy sent to keep us in

view ! That isn't quite the thing, either, to be spying Mr. Fogg, who is so honourable a man ! Ah, gentlemen of the Reform, this shall cost you dear ! ”

Passepartout, enchanted with his discovery, resolved to say nothing to his master, lest he should be justly offended at this mistrust on the part of his adversaries. But he determined to chaff Fix, when he had the chance, with mysterious allusions, which, however, need not betray his real suspicions.

During the afternoon of Wednesday, 30th October, the *Rangoon* entered the Strait of Malacca, which separates the peninsula of that name from Sumatra. The mountainous and craggy islets intercepted the beauties of this noble island from the view of the travellers. The *Rangoon* weighed anchor at Singapore the next day at four a.m., to receive coal, having gained half a day on the prescribed time of her arrival. Phileas Fogg noted this gain in his journal, and then, accompanied by Aouda, who betrayed a desire for a walk on shore, disembarked.

Fix, who suspected Mr. Fogg's every movement, followed them cautiously, without being himself perceived ; while Passepartout, laughing in his sleeve at Fix's manœuvres, went about his usual errands.

The island of Singapore is not imposing in aspect, for there are no mountains ; yet its appearance is not without attractions. It is a park checkered by pleasant highways and avenues. A handsome carriage, drawn by a sleek pair of New Holland horses, carried Phileas Fogg and Aouda into the midst of rows of palms with brilliant foliage, and of clove-trees, whereof the cloves form the heart of a half-open flower. Pepper plants replaced the prickly hedges of European fields ; sago-bushes, large ferns with gorgeous branches, varied the aspect of this tropical clime ; while nutmeg-trees in full foliage filled the air with a penetrating perfume. Agile and grinning bands of monkeys skipped about in the trees, nor were tigers wanting in the jungles.

After a drive of two hours through the country, Aouda

and Mr. Fogg returned to the town, which is a vast collection of heavy-looking, irregular houses, surrounded by charming gardens rich in tropical fruits and plants ; and at ten o'clock they re-embarked, closely followed by the detective, who had kept them constantly in sight.

Passepartout, who had been purchasing several dozen mangoes—a fruit as large as good-sized apples, of a dark-brown colour outside and a bright red within, and whose white pulp, melting in the mouth, affords gourmands a delicious sensation—was waiting for them on deck. He was only too glad to offer some mangoes to Aouda, who thanked him very gracefully for them.

At eleven o'clock the *Rangoon* rode out of Singapore harbour, and in a few hours the high mountains of Malacca, with their forests, inhabited by the most beautifully-furred tigers in the world, were lost to view. Singapore is distant some thirteen hundred miles from the island of Hong Kong, which is a little English colony near the Chinese coast. Phileas Fogg hoped to accomplish the journey in six days, so as to be in time for the steamer which would leave on the 6th of November for Yokohama, the principal Japanese port.

The *Rangoon* had a large quota of passengers, many of whom disembarked at Singapore, among them a number of Indians, Ceylonese, Chinamen, Malays, and Portuguese, mostly second-class travellers.

The weather, which had hitherto been fine, changed with the last quarter of the moon. The sea rolled heavily, and the wind at intervals rose almost to a storm, but happily blew from the south-west, and thus aided the steamer's progress. The captain as often as possible put up his sails, and under the double action of steam and sail the vessel made rapid progress along the coasts of Anam and Cochin China. Owing to the defective construction of the *Rangoon*, however, unusual precautions became necessary in unfavourable weather ; but the loss of time which resulted from this cause, while it nearly drove Passepartout out of

his senses, did not seem to affect his master in the least. Passepartout blamed the captain, the engineer, and the crew, and consigned all who were connected with the ship to the land where the pepper grows. Perhaps the thought of the gas, which was remorselessly burning at his expense in Saville Row, had something to do with his hot impatience.

"You are in a great hurry, then," said Fix to him one day, "to reach Hong Kong?"

"A very great hurry!"

"Mr. Fogg, I suppose, is anxious to catch the steamer for Yokohama?"

"Terribly anxious."

"You believe in this journey around the world, then?"

"Absolutely. Don't you, Mr. Fix?"

"I? I don't believe a word of it."

"You're a sly dog!" said Passepartout, winking at him.

This expression rather disturbed Fix, without his knowing why. Had the Frenchman guessed his real purpose? He knew not what to think. But how could Passepartout have discovered that he was a detective? Yet, in speaking as he did, the man evidently meant more than he expressed.

Passepartout went still further the next day; he could not hold his tongue.

"Mr. Fix," said he, in a bantering tone, "shall we be so unfortunate as to lose you when we get to Hong Kong?"

"Why," responded Fix, a little embarrassed, "I don't know; perhaps——"

"Ah, if you would only go on with us! An agent of the Peninsular Company, you know, can't stop on the way! You were only going to Bombay, and here you are in China. America is not far off, and from America to Europe is only a step."

Fix looked intently at his companion, whose countenance was as serene as possible, and laughed with him. But Passepartout persisted in chaffing him by asking him if he made much by his present occupation.

"Yes, and no," returned Fix; "there is good and bad

luck in such things. But you must understand that I don't travel at my own expense."

"Oh, I am quite sure of that!" cried Passepartout, laughing heartily.

Fix, fairly puzzled, descended to his cabin and gave himself up to his reflections. He was evidently suspected; somehow or other the Frenchman had found out that he was a detective. But had he told his master? What part was he playing in all this: was he an accomplice or not? Was the game, then, up? Fix spent several hours turning these things over in his mind, sometimes thinking that all was lost, then persuading himself that Fogg was ignorant of his presence, and then undecided what course it was best to take.

Nevertheless, he preserved his coolness of mind, and at last resolved to deal plainly with Passepartout. If he did not find it practicable to arrest Fogg at Hong Kong, and if Fogg made preparations to leave that last foothold of English territory, he, Fix, would tell Passepartout all. Either the servant was the accomplice of his master, and in this case the master knew of his operations, and he should fail; or else the servant knew nothing about the robbery, and then his interest would be to abandon the robber.

Such was the situation between Fix and Passepartout. Meanwhile Phileas Fogg moved about above them in the most majestic and unconscious indifference. He was passing methodically in his orbit around the world, regardless of the lesser stars which gravitated around him. Yet there was near by what the astronomers would call a disturbing star, which might have produced an agitation in this gentleman's heart. But no! the charms of Aouda failed to act, to Passepartout's great surprise; and the disturbances, if they existed, would have been more difficult to calculate than those of Uranus which led to the discovery of Neptune.

It was every day an increasing wonder to Passepartout, who read in Aouda's eyes the depths of her gratitude to his master. Phileas Fogg, though brave and gallant, must

be, he thought, quite heartless. As to the sentiment which this journey might have awakened in him, there was clearly no trace of such a thing ; while poor Passepartout existed in perpetual reveries.

One day he was leaning on the railing of the engine-room, and was observing the engine, when a sudden pitch of the steamer threw the screw out of the water. The steam came hissing out of the valves ; and this made Passepartout indignant.

“ The valves are not sufficiently charged ! ” he exclaimed. “ We are not going. Oh, these English ! If this was an American craft, we should blow up, perhaps, but we should at all events go faster ! ”

CHAPTER XVIII

IN WHICH PHILEAS FOGG, PASSEPARTOUT, AND FIX
GO EACH ABOUT HIS BUSINESS

The weather was bad during the latter days of the voyage. The wind, obstinately remaining in the north-west, blew a gale, and retarded the steamer. The *Rangoon* rolled heavily and the passengers became impatient of the long, monstrous waves which the wind raised before their path. A sort of tempest arose on the 3rd of November, the squall knocking the vessel about with fury, and the waves running high. The *Rangoon* reefed all her sails, and even the rigging proved too much, whistling and shaking amid the squall. The steamer was forced to proceed slowly, and the captain estimated that she would reach Hong Kong twenty hours behind time, and more if the storm lasted.

Phileas Fogg gazed at the tempestuous sea, which seemed to be struggling especially to delay him, with his habitual tranquillity. He never changed countenance for an instant, though a delay of twenty hours, by making him too late for the Yokohama boat, would almost inevitably cause

the loss of the wager. But this man of nerve manifested neither impatience nor annoyance ; it seemed as if the storm were a part of his programme, and had been foreseen. Aouda was amazed to find him as calm as he had been from the first time she saw him.

Fix did not look at the state of things in the same light. The storm greatly pleased him. His satisfaction would have been complete had the *Rangoon* been forced to retreat before the violence of wind and waves. Each delay filled him with hope, for it became more and more probable that Fogg would be obliged to remain some days at Hong Kong ; and now the heavens themselves became his allies, with the gusts and squalls. It mattered not that they made him sea-sick—he made no account of this inconvenience ; and, whilst his body was writhing under their effects, his spirit bounded with hopeful exultation.

Passepartout was enraged beyond expression by the unpropitious weather. Everything had gone so well till now ! Earth and sea had seemed to be at his master's service ; steamers and railways obeyed him ; wind and steam united to speed his journey. Had the hour of adversity come ? Passepartout was as much excited as if the twenty thousand pounds were to come from his own pocket. The storm exasperated him, the gale made him furious, and he longed to lash the obstinate sea into obedience. Poor fellow ! Fix carefully concealed from him his own satisfaction, for, had he betrayed it, Passepartout could scarcely have restrained himself from personal violence.

Passepartout remained on deck as long as the tempest lasted, being unable to remain quiet below, and taking it into his head to aid the progress of the ship by lending a hand with the crew. He overwhelmed the captain, officers, and sailors, who could not help laughing at his impatience, with all sorts of questions. He wanted to know exactly how long the storm was going to last ; whereupon he was referred to the barometer, which seemed to have no intention of rising. Passepartout shook it, but with no perceptible effect ;

for neither shaking nor maledictions could prevail upon it to change its mind.

On the 4th, however, the sea became more calm, and the storm lessened its violence ; the wind veered southward, and was once more favourable. Passepartout cleared up with the weather. Some of the sails were unfurled, and the *Rangoon* resumed its most rapid speed. The time lost could not, however, be regained. Land was not signalled until five o'clock on the morning of the 6th ; the steamer was due on the 5th. Phileas Fogg was twenty-four hours behind-hand, and the Yokohama steamer would, of course, be missed.

The pilot went on board at six, and took his place on the bridge, to guide the *Rangoon* through the channels to the port of Hong Kong. Passepartout longed to ask him if the steamer had left for Yokohama ; but he dared not, for he wished to preserve the spark of hope, which still remained till the last moment. He had confided his anxiety to Fix who—the sly rascal !—tried to console him by saying that Mr. Fogg would be in time if he took the next boat ; but this only put Passepartout in a passion.

Mr. Fogg, bolder than his servant, did not hesitate to approach the pilot, and tranquilly ask him if he knew when a steamer would leave Hong Kong for Yokohama.

“ At high tide to-morrow morning,” answered the pilot.

“ Ah ! ” said Mr. Fogg, without betraying any astonishment.

Passepartout, who heard what passed, would willingly have embraced the pilot, while Fix would have been glad to twist his neck.

“ What is the steamer’s name ? ” asked Mr. Fogg.

“ The *Carnatic*.”

“ Ought she not to have gone yesterday ? ”

“ Yes, sir ; but they had to repair one of her boilers, and so her departure was postponed till to-morrow.”

“ Thank you,” returned Mr. Fogg, descending mathematically to the saloon.

Passepartout clasped the pilot's hand and shook it heartily in his delight, exclaiming, "Pilot, you are the best of good fellows !"

The pilot probably does not know to this day why his responses won him this enthusiastic greeting. He remounted the bridge, and guided the steamer through the flotilla of junks, tankas, and fishing boats which crowd the harbour of Hong Kong.

At one o'clock the *Rangoon* was at the quay, and the passengers were going ashore.

Chance had strangely favoured Phileas Fogg, for had not the *Carnatic* been forced to lie over for repairing her boilers, she would have left on the 6th of November, and the passengers for Japan would have been obliged to await for a week the sailing of the next steamer. Mr. Fogg was, it is true, twenty-four hours behind his time ; but this could not seriously imperil the remainder of his tour.

The steamer which crossed the Pacific from Yokohama to San Francisco made a direct connection with that from Hong Kong, and it could not sail until the latter reached Yokohama ; and if Mr. Fogg was twenty-four hours late on reaching Yokohama, this time would no doubt be easily regained in the voyage of twenty-two days across the Pacific. He found himself, then, about twenty-four hours behind-hand, thirty-five days after leaving London.

The *Carnatic* was announced to leave Hong Kong at five the next morning. Mr. Fogg had sixteen hours in which to attend to his business there, which was to deposit Aouda safely with her wealthy relative.

On landing, he conducted her to a palanquin, in which they repaired to the Club Hotel. A room was engaged for the young woman, and Mr. Fogg, after seeing that she wanted for nothing, set out in search of her cousin Jeejeeh. He instructed Passepartout to remain at the hotel until his return, that Aouda might not be left entirely alone.

Mr. Fogg repaired to the Exchange, where, he did not doubt, every one would know so wealthy and considerable

a personage as the Parsee merchant. Meeting a broker, he made the inquiry, to learn that Jeejeeh had left China two years before, and, retiring from business with an immense fortune, had taken up his residence in Europe—in Holland the broker thought, with the merchants of which country he had principally traded. Phileas Fogg returned to the hotel, begged a moment's conversation with Aouda, and, without more ado, apprised her that Jeejeeh was no longer at Hong Kong, but probably in Holland.

Aouda at first said nothing. She passed her hand across her forehead, and reflected a few moments. Then, in her sweet, soft voice, she said : “ What ought I to do, Mr. Fogg ? ”

“ It is very simple,” responded the gentleman. “ Go on to Europe.”

“ But I cannot intrude——”

“ You do not intrude, nor do you in the least embarrass my project. Passepartout ! ”

“ Monsieur.”

“ Go to the *Carnatic*, and engage three cabins.”

Passepartout, delighted that the young woman, who was very gracious to him, was going to continue the journey with them, went off at a brisk gait to obey his master's order.

CHAPTER XIX

IN WHICH PASSEPARTOUT TAKES A TOO GREAT INTEREST IN HIS MASTER, AND WHAT COMES OF IT

Hong Kong is an island which came into the possession of the English by the Treaty of Nankin, after the war of 1842 ; and the colonising genius of the English has created upon it an important city and an excellent port. The island is situated at the mouth of the Canton River, and is separated by about sixty miles from the Portuguese town

of Macao, on the opposite coast. Hong Kong has beaten Macao in the struggle for the Chinese trade, and now the greater part of the transportation of Chinese goods finds its depôt at the former place. Docks, hospitals, wharves, a Gothic cathedral, a government house, macadamised streets, give to Hong Kong the appearance of a town in Kent or Surrey transferred by some strange magic to the antipodes.

Passepartout wandered, with his hands in his pockets, towards the Victoria port, gazing as he went at the curious palanquins and other modes of conveyance, and the groups of Chinese, Japanese, and Europeans who passed to and fro in the streets. Hong Kong seemed to him not unlike Bombay, Calcutta, and Singapore, since, like them, it betrayed everywhere the evidence of English supremacy. At the Victoria port he found a confused mass of ships of all nations : English, French, American, and Dutch, men-of-war and trading vessels, Japanese and Chinese junks, sampas, tankas, and flower-boats, which formed so many floating parterres. Passepartout noticed in the crowd a number of the natives who seemed very old and were dressed in yellow. On going into a barber's to get shaved he learned that these ancient men were all at least eighty years old, at which age they are permitted to wear yellow, which is the Imperial colour. Passepartout, without exactly knowing why, thought this very funny.

On reaching the quay where they were to embark on the *Carnatic*, he was not astonished to find Fix walking up and down. The detective seemed very much disturbed and disappointed.

"This is bad," muttered Passepartout, "for the gentlemen of the Reform Club !" He accosted Fix with a merry smile, as if he had not perceived that gentleman's chagrin. The detective had, indeed, good reasons to inveigh against the bad luck which pursued him. The warrant had not come ! It was certainly on the way, but as certainly it could not now reach Hong Kong for several days ; and, this being

the last English territory on Mr. Fogg's route, the robber would escape, unless he could manage to detain him.

"Well, Monsieur Fix," said Passepartout, "have you decided to go with us so far as America?"

"Yes," returned Fix, through his set teeth.

"Good!" exclaimed Passepartout, laughing heartily. "I knew you could not persuade yourself to separate from us. Come and engage your berth."

They entered the steamer office and secured cabins for four persons. The clerk, as he gave them the tickets, informed them that, the repairs on the *Carnatic* having been completed, the steamer would leave that very evening, and not next morning, as had been announced.

"That will suit my master all the better," said Passepartout. "I will go and let him know."

Fix now decided to make a bold move; he resolved to tell Passepartout all. It seemed to be the only possible means of keeping Phileas Fogg several days longer at Hong Kong. He accordingly invited his companion into a tavern which caught his eye on the quay. On entering, they found themselves in a large room handsomely decorated, at the end of which was a large camp-bed furnished with cushions. Several persons lay upon this bed in a deep sleep. At the small tables which were arranged about the room some thirty customers were drinking English beer, porter, gin, and brandy; smoking, the while, long red clay pipes stuffed with little balls of opium mingled with essence of rose. From time to time one of the smokers, overcome with the narcotic, would slip under the table, whereupon the waiters, taking him by the head and feet, carried and laid him upon the bed. The bed already supported twenty of these stupefied sots.

Fix and Passepartout saw that they were in a smoking-house haunted by those wretched, cadaverous, idiotic creatures to whom the English merchants sell every year the miserable drug called opium, to the amount of one million four hundred thousand pounds—thousands devoted

to one of the most despicable vices which afflict humanity ! The Chinese government has in vain attempted to deal with the evil by stringent laws. It passed gradually from the rich, to whom it was at first exclusively reserved, to the lower classes, and then its ravages could not be arrested. Opium is smoked everywhere, at all times, by men and women, in the Celestial Empire ; and, once accustomed to it, the victims cannot dispense with it, except by suffering horrible bodily contortions and agonies. A great smoker can smoke as many as eight pipes a day ; but he dies in five years. It was in one of these dens that Fix and Passepartout, in search of a friendly glass, found themselves. Passepartout had no money, but willingly accepted Fix's invitation in the hope of returning the obligation at some future time.

They ordered two bottles of port, to which the Frenchman did ample justice, whilst Fix observed him with close attention. They chatted about the journey, and Passepartout was especially merry at the idea that Fix was going to continue it with them. When the bottles were empty, however, he rose to go and tell his master of the change in the time of the sailing of the *Carnatic*.

Fix caught him by the arm, and said, " Wait a moment."

" What for, Mr. Fix ? "

" I want to have a serious talk with you."

" A serious talk ! " cried Passepartout, drinking up the little wine that was left in the bottom of his glass. " Well, we'll talk about it to-morrow ; I haven't time now."

" Stay ! What I have to say concerns your master."

Passepartout, at this, looked attentively at his companion. Fix's face seemed to have a singular expression. He resumed his seat.

" What is it that you have to say ? "

Fix placed his hand upon Passepartout's arm, and, lowering his voice, said, " You have guessed who I am ? "

" *Parbleu !* " said Passepartout, smiling.

" Then I'm going to tell you everything——"

" Now that I know everything, my friend ! Ah ! that's

very good. But go on, go on. First, though, let me tell you that those gentlemen have put themselves to a useless expense."

"Useless!" said Fix. "You speak confidently. It's clear that you don't know how large the sum is."

"Of course I do," returned Passepartout. "Twenty thousand pounds."

"Fifty-five thousand!" answered Fix, pressing his companion's hand.

"What!" cried the Frenchman. "Has Monsieur Fogg dared—fifty-five thousand pounds! Well, there's all the more reason for not losing an instant," he continued, getting up hastily.

Fix pushed Passepartout back in his chair, and resumed: "Fifty-five thousand pounds; and if I succeed, I get two thousand pounds. If you'll help me, I'll let you have five hundred of them."

"Help you?" cried Passepartout, whose eyes were standing wide open.

"Yes; help me keep Mr. Fogg here for two or three days."

"Why, what are you saying? Those gentlemen are not satisfied with following my master and suspecting his honour, but they must try to put obstacles in his way! I blush for them!"

"What do you mean?"

"I mean that it is a piece of shameful trickery. They might as well waylay Mr. Fogg and put his money in their pockets!"

"That's just what we count on doing."

"It's a conspiracy, then," cried Passepartout, who became more and more excited as the liquor mounted in his head, for he drank without perceiving it. "A real conspiracy! And gentlemen, too. Bah!"

Fix began to be puzzled.

"Members of the Reform Club!" continued Passepartout. "You must know, Monsieur Fix, that my master

is an honest man, and that, when he makes a wager, he tries to win it fairly ! ”

“ But who do you think I am ? ” asked Fix, looking at him intently.

“ *Parbleu !* An agent of the members of the Reform Club, sent out here to interrupt my master’s journey, But, though I found you out some time ago, I’ve taken good care to say nothing about it to Mr. Fogg.”

“ He knows nothing, then ? ”

“ Nothing,” replied Passepartout, again emptying his glass. The detective passed his hand across his forehead, hesitating before he spoke again. What should he do ? Passepartout’s mistake seemed sincere, but it made his design more difficult. It was evident that the servant was not the master’s accomplice, as Fix had been inclined to suspect.

“ Well,” said the detective to himself, “ as he is not an accomplice, he will help me.”

He had no time to lose : Fogg must be detained at Hong Kong, so he resolved to make a clean breast of it.

“ Listen to me,” said Fix abruptly. “ I am not, as you think, an agent of the members of the Reform Club——”

“ Bah ! ” retorted Passepartout, with an air of raillery.

“ I am a police detective, sent out here by the London office.”

“ You, a detective ? ”

“ I will prove it. Here is my commission.”

Passepartout was speechless with astonishment when Fix displayed this document, the genuineness of which could not be doubted.

“ Mr. Fogg’s wager,” resumed Fix, “ is only a pretext, of which you and the gentlemen of the Reform are dupes. He had a motive for securing your innocent complicity.”

“ But why ? ”

“ Listen. On the 28th of last September a robbery of fifty-five thousand pounds was committed at the Bank of England by a person whose description was fortunately

secured. Here is this description ; it answers exactly to that of Mr. Phileas Fogg."

"What nonsense !" cried Passepartout, striking the table with his fist. "My master is the most honourable of men !"

"How can you tell ? You know scarcely anything about him. You went into his service the day he came away ; and he came away on a foolish pretext, without trunks, and carrying a large amount in banknotes. And yet you are bold enough to assert that he is an honest man !"

"Yes, yes," repeated the poor fellow, mechanically.

"Would you like to be arrested as his accomplice ?"

Passepartout, overcome by what he had heard, held his head between his hands, and did not dare to look at the detective. Phileas Fogg, the saviour of Aouda, that brave and generous man, a robber ! And yet how many presumptions there were against him ! Passepartout essayed to reject the suspicions which forced themselves upon his mind ; he did not wish to believe that his master was guilty.

"Well, what do you want of me ?" said he, at last, with an effort.

"See here," replied Fix ; "I have tracked Mr. Fogg to this place, but as yet I have failed to receive the warrant of arrest for which I sent to London. You must help me to keep him here in Hong Kong——"

"I ! But I——"

"I will share with you the two thousand pounds reward offered by the Bank of England."

"Never !" replied Passepartout, who tried to rise, but fell back, exhausted in mind and body.

"Mr. Fix," he stammered, "even should what you say be true—if my master is really the robber you are seeking for—which I deny—I have been, am, in his service ; I have seen his generosity and goodness ; and I will never betray him—not for all the gold in the world. I come from a village where they don't eat that kind of bread !"

"You refuse ?"

"I refuse."

"Consider that I've said nothing," said Fix ; "and let us drink."

"Yes ; let us drink !"

Passepartout felt himself yielding more and more to the effects of the liquor. Fix, seeing that he must, at all hazards, be separated from his master, wished to entirely overcome him. Some pipes full of opium lay upon the table. Fix slipped one into Passepartout's hand. He took it, put it between his lips, lit it, drew several puffs, and his head, becoming heavy under the influence of the narcotic, fell upon the table.

"At last !" said Fix, seeing Passepartout unconscious. "Mr. Fogg will not be informed of the *Carnatic's* departure ; and, if he is, he will have to go without this cursed Frenchman !"

And, after paying his bill, Fix left the tavern.

CHAPTER XX

IN WHICH FIX COMES FACE TO FACE WITH PHILEAS
FOGG

While these events were passing at the opium-house, Mr. Fogg, unconscious of the danger he was in of losing the steamer, was quietly escorting Aouda about the streets of the English quarter, making the necessary purchases for the long voyage before them. It was all very well for an Englishman like Mr. Fogg to make the tour of the world with a carpet-bag ; a lady could not be expected to travel comfortably under such conditions. He acquitted his task with characteristic serenity, and invariably replied to the remonstrances of his fair companion, who was confused by his patience and generosity :

"It is in the interest of my journey—a part of my programme."

The purchases made, they returned to the hotel, where they dined at a sumptuously served *table-d'hôte* ; after which Aouda, shaking hands with her protector after the English fashion, retired to her room for rest. Mr. Fogg absorbed himself throughout the evening in the perusal of *The Times* and *Illustrated London News*.

Had he been capable of being astonished at anything, it would have been not to see his servant return at bed-time. But, knowing that the steamer was not to leave for Yokohama until the next morning, he did not disturb himself about the matter. When Passepartout did not appear the next morning to answer his master's bell, Mr. Fogg, not betraying the least vexation, contented himself with taking his carpet-bag, calling Aouda, and sending for a palanquin.

It was then eight o'clock ; at half-past nine, it being then high tide, the *Carnatic* would leave the harbour. Mr. Fogg and Aouda got into the palanquin, their luggage being brought after on a wheelbarrow, and half an hour later stepped upon the quay whence they were to embark. Mr. Fogg then learned that the *Carnatic* had sailed the evening before. He had expected to find not only the steamer, but his domestic, and was forced to give up both ; but no sign of disappointment appeared on his face, and he merely remarked to Aouda, " It is an accident, madam ; nothing more."

At this moment a man who had been observing him attentively approached. It was Fix, who, bowing, addressed Mr. Fogg : " Were you not, like me, sir, a passenger by the *Rangoon*, which arrived yesterday ? "

" I was, sir," replied Mr. Fogg coldly. " But I have not the honour——"

" Pardon me ; I thought I should find your servant here."

" Do you know where he is, sir ? " asked Aouda anxiously.

" What ! " responded Fix, feigning surprise. " Is he not with you ? "

" No," said Aouda. " He has not made his appearance

since yesterday. Could he have gone on board the *Carnatic* without us ? ”

“ Without you, madam ? ” answered the detective.
“ Excuse me, did you intend to sail in the *Carnatic* ? ”

“ Yes, sir.”

“ So did I, madam, and I am excessively disappointed. The *Carnatic*, its repairs being completed, left Hong Kong twelve hours before the stated time, without any notice being given ; and we must now wait a week for another steamer.”

As he said “ a week ” Fix felt his heart leap for joy. Fogg detained at Hong Kong for a week ! There would be time for the warrant to arrive, and fortune at last favoured the representative of the law. His horror may be imagined when he heard Mr. Fogg say, in his placid voice, “ But there are other vessels besides the *Carnatic*, it seems to me, in the harbour of Hong Kong.”

And, offering his arm to Aouda, he directed his steps toward the docks in search of some craft about to start. Fix, stupefied, followed ; it seemed as if he were attached to Mr. Fogg by an invisible thread. Chance, however, appeared really to have abandoned the man it had hitherto served so well. For three hours Phileas Fogg wandered about the docks, with the determination, if necessary, to charter a vessel to carry him to Yokohama ; but he could only find vessels which were loading or unloading, and which could not therefore set sail. Fix began to hope again.

But Mr. Fogg, far from being discouraged, was continuing his search, resolved not to stop if he had to resort to Macao, when he was accosted by a sailor on one of the wharves.

“ Is your honour looking for a boat ? ”

“ Have you a boat ready to sail ? ”

“ Yes, your honour ; a pilot-boat—No. 43—the best in the harbour.”

“ Does she go fast ? ”

“ Between eight and nine knots the hour. Will you look at her ? ”

"Yes."

"Your honour will be satisfied with her. Is it for a sea excursion?"

"No; for a voyage."

"A voyage?"

"Yes; will you agree to take me to Yokohama?"

The sailor leaned on the railing, opened his eyes wide, and said, "Is your honour joking?"

"No. I have missed the *Carnatic*, and I must get to Yokohama by the 14th at the latest, to take the boat for San Francisco."

"I am sorry," said the sailor; "but it is impossible."

"I offer you a hundred pounds per day, and an additional reward of two hundred pounds if I reach Yokohama in time."

"Are you in earnest?"

"Very much so."

The pilot walked away a little distance, and gazed out to sea, evidently struggling between the anxiety to gain a large sum and the fear of venturing so far. Fix was in mortal suspense.

Mr. Fogg turned to Aouda and asked her, "You would not be afraid, would you, madam?"

"Not with you, Mr. Fogg," was her answer.

The pilot now returned, shuffling his hat in his hands.

"Well, pilot?" said Mr. Fogg.

"Well, your honour," replied he, "I could not risk myself, my men, or my little boat of scarcely twenty tons on so long a voyage at this time of year. Besides, we could not reach Yokohama in time, for it is sixteen hundred and sixty miles from Hong Kong."

"Only sixteen hundred," said Mr. Fogg.

"It's the same thing."

Fix breathed more freely.

"But," added the pilot, "it might be arranged another way."

Fix ceased to breathe at all.

"How?" asked Mr. Fogg.

"By going to Nagasaki, at the extreme south of Japan, or even to Shanghai, which is only eight hundred miles from here. In going to Shanghai we should not be forced to sail wide of the Chinese coast, which would be a great advantage, as the currents run northward, and would aid us."

"Pilot," said Mr. Fogg, "I must take the American steamer at Yokohama, and not at Shanghai or Nagasaki."

"Why not?" returned the pilot. "The San Francisco steamer does not start from Yokohama. It puts in at Yokohama and Nagasaki, but it starts from Shanghai."

"You are sure of that?"

"Perfectly."

"And when does the boat leave Shanghai?"

"On the 11th, at seven in the evening. We have, therefore, four days before us, that is ninety-six hours; and in that time, if we had good luck and a south-west wind, and the sea was calm, we could make those eight hundred miles to Shanghai."

"And you could go——"

"In an hour; as soon as provisions could be got aboard and the sails put up."

"It is a bargain. Are you the master of the boat?"

"Yes; John Bunsby, master of the *Tankadere*."

"Would you like some earnest-money?"

"If it would not put your honour out——"

"Here are two hundred pounds on account sir," added Phileas Fogg, turning to Fix, "if you would like to take advantage——"

"Thanks, sir; I was about to ask the favour."

"Very well. In half an hour we shall go on board."

"But poor Passepartout?" urged Aouda, who was much disturbed by the servant's disappearance.

"I shall do all I can to find him," replied Phileas Fogg.

While Fix, in a feverish, nervous state, repaired to the

pilot-boat, the others directed their course to the police-station at Hong Kong. Phileas Fogg there gave Passepartout's description, and left a sum of money to be spent in the search for him. The same formalities having been gone through at the French consulate, and the palanquin having stopped at the hotel for the luggage, which had been sent back there, they returned to the wharf.

It was now three o'clock ; and pilot-boat No. 43, with its crew on board, and its provisions stored away, was ready for departure.

The *Tankadere* was a neat little craft of twenty tons, as gracefully built as if she were a racing yacht. Her shining copper sheathing, her galvanised iron-work, her deck, white as ivory, betrayed the pride taken by John Bunsby in making her presentable. Her two masts leaned a trifle backward ; she carried brigantine, foresail, storm-jib, and standing-jib, and was well rigged for running before the wind ; and she seemed capable of brisk speed, which, indeed, she had already proved by gaining several prizes in pilot-boat races. The crew of the *Tankadere* was composed of John Bunsby, the master, and four hardy mariners, who were familiar with the Chinese seas. John Bunsby, himself, a man of forty-five or thereabouts, vigorous, sunburnt, with a sprightly expression of the eye, and energetic and self-reliant countenance, would have inspired confidence in the most timid.

Phileas Fogg and Aouda went on board, where they found Fix already installed. Below deck was a square cabin, of which the walls bulged out in the form of cots, above a circular divan ; in the centre was a table provided with a swinging lamp. The accommodation was confined, but neat.

" I am sorry to have nothing better to offer you," said Mr. Fogg to Fix, who bowed without responding.

The detective had a feeling akin to humiliation in profiting by the kindness of Mr. Fogg.

" It's certain," thought he, " though rascal as he is, he is a polite one ! "

The sails and the English flag were hoisted at ten minutes past three. Mr. Fogg and Aouda, who were seated on deck, cast a last glance at the quay, in the hope of espying Passepartout. Fix was not without his fears lest chance should direct the steps of the unfortunate servant, whom he had so badly treated, in this direction ; in which case an explanation the reverse of satisfactory to the detective must have ensued. But the Frenchman did not appear, and, without doubt, was still lying under the stupefying influence of the opium.

John Bunsby, master, at length gave the order to start, and the *Tankadere*, taking the wind under her brigantine, foresail, and standing-jib, bounded briskly forward over the waves.

CHAPTER XXI

IN WHICH THE MASTER OF THE "TANKADERE" RUNS
GREAT RISK OF LOSING A REWARD OF TWO HUNDRED
POUNDS

THIS voyage of eight hundred miles was a perilous venture on a craft of twenty tons, and at that season of the year. The Chinese seas are usually boisterous, subject to terrible gales of wind, and especially during the equinoxes ; and it was now early November.

It would clearly have been to the master's advantage to carry his passengers to Yokohama, since he was paid a certain sum per day ; but he would have been rash to attempt such a voyage, and it was imprudent even to attempt to reach Shanghai. But John Bunsby believed in the *Tankadere*, which rode on the waves like a seagull ; and perhaps he was not wrong.

Late in the day they passed through the capricious channels of Hong Kong, and the *Tankadere*, impelled by favourable winds, conducted herself admirably.

"I do not need, pilot," said Phileas Fogg, when they got into the open sea, "to advise you to use all possible speed."

"Trust me, your honour. We are carrying all the sail the wind will let us. The poles would add nothing, and are only used when we are going into port."

"It's your trade, not mine, pilot, and I confide in you."

Phileas Fogg, with body erect and legs wide apart, standing like a sailor, gazed without staggering at the swelling waters. The young woman, who was seated aft, was profoundly affected as she looked out upon the ocean, darkening now with the twilight, on which she had ventured in so frail a vessel. Above her head rustled the white sails, which seemed like great white wings. The boat, carried forward by the wind, seemed to be flying in the air.

Night came. The moon was entering her first quarter, and her insufficient light would soon die out in the mist on the horizon. Clouds were rising from the east, and already overcast a part of the heavens.

The pilot had hung out his lights, which was very necessary in these seas crowded with vessels bound landward; for collisions are not uncommon occurrences, and, at the speed she was going, the least shock would shatter the gallant little craft.

Fix, seated in the bow, gave himself up to meditation. He kept apart from his fellow-travellers, knowing Mr. Fogg's taciturn tastes; besides, he did not quite like to talk to the man whose favours he had accepted. He was thinking, too, of the future. It seemed certain that Fogg would not stop at Yokohama, but would at once take the boat for San Francisco; and the vast extent of America would ensure him impunity and safety. Fogg's plan appeared to him the simplest in the world. Instead of sailing directly from England to the United States, like a common villain, he had traversed three quarters of the globe, so as to gain the American continent more surely; and there, after throwing the police off his track, he would quietly enjoy himself with the fortune stolen from the bank. But, once in the United

States, what should he, Fix, do ? Should he abandon this man ? No, a hundred times no ! Until he had secured his extradition, he would not lose sight of him for an hour. It was his duty, and he would fulfil it to the end. At all events, there was one thing to be thankful for ; Passepartout was not with his master ; and it was above all important, after the confidences Fix had imparted to him, that the servant should never have speech with his master.

Phileas Fogg was also thinking of Passepartout, who had so strangely disappeared. Looking at the matter from every point of view, it did not seem to him impossible that, by some mistake, the man might have embarked on the *Carnatic* at the last moment ; and this was also Aouda's opinion, who regretted very much the loss of the worthy fellow to whom she owed so much. They might then find him at Yokohama ; for, if the *Carnatic* was carrying him thither, it would be easy to ascertain if he had been on board.

A brisk breeze arose about ten o'clock ; but, though it might have been prudent to take in a reef, the pilot, after carefully examining the heavens, let the craft remain rigged as before. The *Tankadere* bore sail admirably, as she drew a great deal of water, and everything was prepared for high speed in case of a gale.

Mr. Fogg and Aouda descended into the cabin at midnight, having been already preceded by Fix, who had lain down on one of the cots. The pilot and crew remained on deck all night.

At sunrise the next day, which was 8th November, the boat had made more than one hundred miles. The log indicated a mean speed of between eight and nine miles. The *Tankadere* still carried all sail, and was accomplishing her greatest capacity of speed. If the wind held as it was, the chances would be in her favour. During the day she kept along the coast, where the currents were favourable ; the coast, irregular in profile, and visible sometimes across the clearings, was at most five miles distant. The sea was less boisterous, since the wind came off land—a fortunate

circumstance for the boat, which would suffer, owing to its small tonnage, by a heavy surge on the sea.

The breeze subsided a little towards noon, and set in from the south-west. The pilot put up his poles, but took them down again within two hours, as the wind freshened up anew.

Mr. Fogg and Aouda, happily unaffected by the roughness of the sea, ate with a good appetite, Fix being invited to share their repast, which he accepted with secret chagrin. To travel at this man's expense and live upon his provisions was not palatable to him. Still, he was obliged to eat, and so he ate.

When the meal was over, he took Mr. Fogg apart, and said, "sir"—this "sir" scorched his lips, and he had to control himself to avoid collaring this "gentleman"—"sir, you have been very kind to give me a passage on this boat. But, though my means will not admit of my expending them as freely as you, I must ask to pay my share——"

"Let us not speak of that, sir," replied Mr. Fogg.

"But, if I insist——"

"No, sir," repeated Mr. Fogg, in a tone which did not admit of a reply. "This enters into my general expenses."

Fix, as he bowed, had a stifled feeling, and, going forward, where he ensconced himself, did not open his mouth for the rest of the day.

Meanwhile they were progressing famously, and John Bunsby was in high hope. He several times assured Mr. Fogg that they would reach Shanghai in time; to which that gentleman responded that he counted upon it. The crew set to work in good earnest, inspired by the reward to be gained. There was not a sheet which was not tightened, not a sail which was not vigorously hoisted; not a lurch could be charged to the man at the helm. They worked as desperately as if they were contesting in a Royal yacht regatta.

By evening, the log showed that two hundred and twenty miles had been accomplished from Hong Kong, and Mr. Fogg might hope that he would be able to reach Yokohama without recording any delay in his journal; in which

case, the many misadventures which had overtaken him since he left London would not seriously affect his journey.

The *Tankadere* entered the Straits of Fo-Kien, which separate the island of Formosa from the Chinese coast, in the small hours of the night, and crossed the Tropic of Cancer. The sea was very rough in the straits, full of eddies formed by the counter-currents, and the chopping waves broke her course, whilst it became very difficult to stand on deck.

At daybreak the wind began to blow hard again, and the heavens seemed to predict a gale. The barometer announced a speedy change, the mercury rising and falling capriciously ; the sea also, in the south-east, raised long surges which indicated a tempest. The sun had set the evening before in a red mist, in the midst of the phosphorescent scintillations of the ocean.

John Bunsby long examined the threatening aspect of the heavens, muttering indistinctly between his teeth. At last he said in a low voice to Mr. Fogg, " Shall I speak out to your honour ? "

" Of course."

" Well, we are going to have a squall."

" Is the wind north or south ? " asked Mr. Fogg quietly.

" South. Look ! a typhoon is coming up."

" Glad it's a typhoon from the south, for it will carry us forward."

" Oh, if you take it that way," said John Bunsby, " I've nothing more to say." John Bunsby's suspicions were confirmed. At a less advanced season of the year the typhoon, according to a famous meteorologist, would have passed away like a luminous cascade of electric flame ; but in the winter equinox it was to be feared that it would burst upon them with great violence.

The pilot took his precautions in advance. He reefed all sail, the pole-masts were dispensed with ; all hands went forward to the bows. A single triangular sail, of strong canvas, was hoisted as a storm-jib, so as to hold the wind from behind. Then they waited.

John Bunsby had requested his passengers to go below ; but this imprisonment in so narrow a space, with little air, and the boat bouncing in the gale, was far from pleasant. Neither Mr. Fogg, Fix, nor Aouda consented to leave the deck.

The storm of rain and wind descended upon them towards eight o'clock. With but its bit of sail, the *Tankadere* was lifted like a feather by a wind, an idea of whose violence can scarcely be given. To compare her speed to four times that of a locomotive going on full steam would be below the truth.

The boat scudded thus northward during the whole day, borne on by monstrous waves, preserving always, fortunately, a speed equal to theirs. Twenty times she seemed almost to be submerged by these mountains of water which rose behind her ; but the adroit management of the pilot saved her. The passengers were often bathed in spray, but they submitted to it philosophically. Fix cursed it, no doubt ; but Aouda, with her eyes fastened upon her protector, whose coolness amazed her, showed herself worthy of him, and bravely weathered the storm. As for Phileas Fogg, it seemed just as if the typhoon were a part of his programme.

Up to this time the *Tankadere* had always held her course to the north ; but towards evening the wind, veering three quarters, bore down from the north-west. The boat, now lying in the trough of the waves, shook and rolled terribly ; the sea struck her with fearful violence. At night the tempest increased in violence. John Bunsby saw the approach of darkness and the rising of the storm with dark misgivings. He thought awhile, and then asked his crew if it was not time to slacken speed. After a consultation he approached Mr. Fogg, and said, " I think, your honour, that we should do well to make for one of the ports on the coast."

" I think so too."

" Ah ! " said the pilot. " But which one ? "

" I know of but one," returned Mr. Fogg tranquilly.

“ And that is——”

“ Shanghai.”

The pilot, at first, did not seem to comprehend ; he could scarcely realise so much determination and tenacity. Then he cried, “ Well—yes ! Your honour is right. To Shanghai !”

So the *Tankadere* kept steadily on her northward track.

The night was really terrible ; it would be a miracle if the craft did not founder. Twice it would have been all over with her if the crew had not been constantly on the watch. Aouda was exhausted, but did not utter a complaint. More than once Mr. Fogg rushed to protect her from the violence of the waves.

Day reappeared. The tempest still raged with undiminished fury ; but the wind now returned to the south-east. It was a favourable change, and the *Tankadere* again bounded forward on this mountainous sea, though the waves crossed each other, and imparted shocks and counter-shocks which would have crushed a craft less solidly built. From time to time the coast was visible through the broken mist, but no vessel was in sight. The *Tankadere* was alone upon the sea.

There were some signs of a calm at noon, and these became more distinct as the sun descended toward the horizon. The tempest had been as brief as terrific. The passengers, thoroughly exhausted, could now eat a little, and take some repose.

The night was comparatively quiet. Some of the sails were again hoisted, and the speed of the boat was very good. The next morning at dawn they espied the coast, and John Bunsby was able to assert that they were not one hundred miles from Shanghai. A hundred miles, and only one day to traverse them ! That very evening Mr. Fogg was due at Shanghai, if he did not wish to miss the steamer to Yokohama. Had there been no storm, during which several hours were lost, they would be at this moment within thirty miles of their destination.

The wind grew decidedly calmer, and happily the sea

fell with it. All sails were now hoisted, and at noon the *Tankadere* was within forty-five miles of Shanghai. There remained yet six hours in which to accomplish that distance. All on board feared that it could not be done, and every one—Phileas Fogg, no doubt, excepted—felt his heart beat with impatience. The boat must keep up an average of nine miles an hour, and the wind was becoming calmer every moment ! It was a capricious breeze, coming from the coast, and after it passed the sea became smooth. Still, the *Tankadere* was so light, and her fine sails caught the fickle zephyrs so well, that, with the aid of the current, John Bunsby found himself at six o'clock not more than ten miles from the mouth of Shanghai River. Shanghai itself is situated at least twelve miles up the stream. At seven they were still three miles from Shanghai. The pilot swore an angry oath ; the reward of two hundred pounds was evidently on the point of escaping him. He looked at Mr. Fogg. Mr. Fogg was perfectly tranquil ; and yet his whole fortune was at this moment at stake.

At this moment, also, a long black funnel, crowned with wreaths of smoke, appeared on the edge of the waters. It was the American steamer, leaving for Yokohama at the appointed time.

“ Confound her ! ” cried John Bunsby, pushing back the rudder with a desperate jerk.

“ Signal her ! ” said Phileas Fogg quietly.

A small brass cannon stood on the forward deck of the *Tankadere*, for making signals in the fogs. It was loaded to the muzzle ; but just as the pilot was about to apply a red-hot coal to the touchhole, Mr. Fogg said, “ Hoist your flag ! ”

The flag was run up at half-mast, and, this being the signal of distress, it was hoped that the American steamer, perceiving it, would change her course a little, so as to succour the pilot-boat.

“ Fire ! ” said Mr. Fogg. And the booming of the little cannon resounded in the air.

CHAPTER XXII

IN WHICH PASSEPARTOUT FINDS OUT THAT, EVEN AT THE ANTIPODES, IT IS CONVENIENT TO HAVE SOME MONEY IN ONE'S POCKET

The *Carnatic*, setting sail from Hong Kong at half-past six on the 7th of November, directed her course at full steam towards Japan. She carried a large cargo and a well-filled cabin of passengers. Two state-rooms in the rear were, however, unoccupied—those which had been engaged by Phileas Fogg.

The next day a passenger with a half-stupefied eye, staggering gait, and disordered hair, was seen to emerge from the second cabin, and to totter to a seat on deck.

It was Passepartout ; and what had happened to him was as follows : Shortly after Fix left the opium den, two waiters had lifted the unconscious Passepartout, and had carried him to the bed reserved for the smokers. Three hours later, pursued even in his dreams by a fixed idea, the poor fellow awoke, and struggled against the stupefying influence of the narcotic. The thought of a duty unfulfilled shook off his torpor, and he hurried from the abode of drunkenness. Staggering and holding himself up by keeping against the walls, falling down and creeping up again, and irresistibly impelled by a kind of instinct, he kept crying out, “ The *Carnatic* ! the *Carnatic* ! ”

The steamer lay puffing alongside the quay, on the point of starting. Passepartout had but few steps to go ; and, rushing upon the plank, he crossed it, and fell unconscious on the deck, just as the *Carnatic* was moving off. Several sailors, who were evidently accustomed to this sort of scene, carried the poor Frenchman down into the second cabin, and Passepartout did not wake until they were one hundred and fifty miles away from China. Thus he found himself the next morning on the deck of the *Carnatic*, and eagerly inhaling the exhilarating sea-breeze. The pure air sobered

him. He began to collect his sense, which he found a difficult task ; but at last he recalled the events of the evening before, Fix's revelation, and the opium-house.

"It is evident," said he to himself, "that I have been abominably drunk ! What will Mr. Fogg say ? At least I have not missed the steamer, which is the most important thing."

Then, as Fix occurred to him : "As for that rascal, I hope we are well rid of him, and that he has not dared, as he proposed, to follow us on board the *Carnatic*. A detective on the track of Mr. Fogg, accused of robbing the Bank of England ! Pshaw ! Mr. Fogg is no more a robber than I am a murderer."

Should he divulge Fix's real errand to his master ? Would it do to tell the part the detective was playing. Would it not be better to wait until Mr. Fogg reached London again, and then impart to him that an agent of the metropolitan police had been following him round the world, and have a good laugh over it ? No doubt ; at least, it was worth considering. The first thing to do was to find Mr. Fogg, and apologise for his singular behaviour.

Passepartout got up and proceeded, as well as he could with the rolling of the steamer, to the after-deck. He saw no one who resembled either his master or Aouda. "Good !" muttered he ; "Aouda has not got up yet, and Mr. Fogg has probably found some partners at whist."

He descended to the saloon. Mr. Fogg was not there. Passepartout had only, however, to ask the purser the number of his master's state-room. The purser replied that he did not know any passenger by the name of Fogg.

"I beg your pardon," said Passepartout persistently. "He is a tall gentleman, quiet, and not very talkative, and has with him a young lady——"

"There is no young lady on board," interrupted the purser. "Here is a list of the passengers ; you may see for yourself."

Passepartout scanned the list, but his master's name was not upon it. All at once an idea struck him.

"Ah ! am I on the *Carnatic* ? "

"Yes."

“ On the way to Yokohama ? ”

“ Certainly.”

Passepartout had for an instant feared that he was on the wrong boat ; but, though he was really on the *Carnatic*, his master was not there.

He fell thunderstruck on a seat. He saw it all now. He remembered that the time of sailing had been changed, that he should have informed his master of that fact, and that he had not done so. It was his fault, then, that Mr. Fogg and Aouda had missed the steamer. Yes, but it was still more the fault of the traitor who, in order to separate him from his master, and detain the latter at Hong Kong, had inveigled him into getting drunk ! He now saw the detective's trick ; and at this moment Mr. Fogg was certainly ruined, his bet was lost, and he himself perhaps arrested and imprisoned ! At this thought Passepartout tore his hair. Ah, if Fix ever came within his reach, what a settling of accounts there would be !

After his first depression, Passepartout became calmer, and began to study his situation. It was certainly not an enviable one. He found himself on the way to Japan, and what should he do when he got there ? His pocket was empty ; he had not a solitary shilling—not so much as a penny. His passage had fortunately been paid for in advance ; and he had five or six days in which to decide upon his future course. He fell to at meals with an appetite, and ate for Mr. Fogg, Aouda, and himself. He helped himself as generously as if Japan were a desert, where nothing to eat was to be looked for.

At dawn on the 13th the *Carnatic* entered the port of Yokohama. This is an important port of call in the Pacific, where all the mail-steamers, and those carrying travellers between North America, China, Japan, and the Oriental islands put in. It is situated in the bay of Yeddo, and at but a short distance from that second capital of the Japanese Empire, and the residence of the Tycoon, the civil Emperor, before the Mikado, the spiritual Emperor,

absorbed his office in his own. The *Carnatic* anchored at the quay near the custom-house, in the midst of a crowd of ships bearing the flags of all nations.

Passepartout went timidly ashore on this so curious territory of the Sons of the Sun. He had nothing better to do than, taking chance for his guide, to wander aimlessly through the streets of Yokohama. He found himself at first in a thoroughly European quarter, the houses having low fronts, and being adorned with verandas, beneath which he caught glimpses of neat peristyles. This quarter occupied, with its streets, squares, docks, and warehouses, all the space between the "promontory of the Treaty" and the river. Here, as at Hong Kong and Calcutta, were mixed crowds of all races—Americans and English, Chinamen and Dutchmen, mostly merchants ready to buy or sell anything. The Frenchman felt himself as much alone among them as if he had dropped down in the midst of Hottentots.

He had, at least, one resource—to call on the French and English consuls at Yokohama for assistance. But he shrank from telling the story of his adventures, intimately connected as it was with that of his master; and, before doing so, he determined to exhaust all other means of aid. As chance did not favour him in the European quarter, he penetrated that inhabited by the native Japanese, determined, if necessary, to push on to Yeddo.

The Japanese quarter of Yokohama is called Benten, after the goddess of the sea, who is worshipped on the islands round about. There Passepartout beheld beautiful fir and cedar groves, sacred gates of a singular architecture, bridges half hid in the midst of bamboos and reeds, temples shaded by immense cedar-trees, holy retreats where were sheltered Buddhist priests and sectaries of Confucius, and interminable streets, where a perfect harvest of rose-tinted and red-cheeked children, who looked as if they had been cut out of Japanese screens, and who were playing in the midst of short-legged poodles and yellowish cats, might have been gathered.

The streets were crowded with people. Priests were passing

in processions, beating their dreary tambourines ; police and custom-house officers with pointed hats encrusted with lac, and carrying two sabres hung to their waists ; soldiers, clad in blue cotton with white stripes, and bearing guns ; the Mikado's guards, enveloped in silken doublets, hauberks and coats of mail ; and numbers of military folk of all ranks—for the military profession is as much respected in Japan as it is despised in China—went hither and thither in groups and pairs. Passepartout saw, too, begging friars, long-robed pilgrims, and simple civilians, with their warped and jet-black hair, big heads, long busts, slender legs, short stature, and complexions varying from copper-colour to a dead white, but never yellow, like the Chinese, from whom the Japanese widely differ. He did not fail to observe the curious equipages—carriages and palanquins, barrows supplied with sails, and litters made of bamboo ; nor the women—whom he thought not especially handsome—who took little steps with their little feet, whereon they wore canvas shoes, straw sandals, and clogs of worked wood, and who displayed tight-looking eyes, flat chests, teeth fashionably blackened, and gowns crossed with silken scarfs, tied in an enormous knot behind—an ornament which the modern Parisian ladies seem to have borrowed from the dames of Japan.

Passepartout wandered for several hours in the midst of this motley crowd, looking in at the windows of the rich and curious shops, the jewellery establishments glittering with quaint Japanese ornaments, the restaurants decked with streamers and banners, the tea-houses, where the odorous beverage was being drunk with saki, a liquor concocted from the fermentation of rice, and the comfortable smoking-houses, where they were puffing, not opium, which is almost unknown in Japan, but a very fine, stringy tobacco. He went on till he found himself in the fields, in the midst of vast rice plantations. There he saw dazzling camellias expanding themselves, with flowers which were giving forth their last colours and perfumes, not on bushes, but on trees, and within bamboo enclosures, cherry, plum, and apple

trees, which the Japanese cultivate rather for their blossoms than their fruit, and which queerly-fashioned, grinning scarecrows protected from the sparrows, pigeons, ravens, and other voracious birds. On the branches of the cedars were perched large eagles ; amid the foliage of the weeping willows were herons, solemnly standing on one leg ; and on every hand were crows, ducks, hawks, wild birds, and a multitude of cranes, which the Japanese consider sacred, and which to their minds symbolise long life and prosperity.

As he was strolling along, Passepartout espied some violets among the shrubs.

“ Good ! ” said he ; “ I’ll have some supper.”

But, on smelling them, he found that they were odourless.

“ No chance there,” thought he.

The worthy fellow had certainly taken good care to eat as hearty a breakfast as possible before leaving the *Carnatic* ; but, as he had been walking about all day, the demands of hunger were becoming importunate. He observed that the butchers’ stalls contained neither mutton, goat, nor pork ; and, knowing also that it is a sacrilege to kill cattle, which are preserved solely for farming, he made up his mind that meat was far from plentiful in Yokohama—nor was he mistaken ; and, in default of butcher’s meat, he could have wished for a quarter of wild boar or deer, a partridge, or some quails, some game or fish, which, with rice, the Japanese eat almost exclusively. But he found it necessary to keep up a stout heart, and to postpone the meal he craved till the following morning. Night came, and Passepartout re-entered the native quarter, where he wandered through the streets, lit by vari-coloured lanterns, looking on at the dancers, who were executing skilful steps and boundings, and the astrologers who stood in the open air with their telescopes. Then he came to the harbour, which was lit up by the resin torches of the fishermen, who were fishing from their boats.

The streets at last became quiet, and the patrol, the officers of which, in their splendid costumes, and surrounded

by their suites, Passepartout thought seemed like ambassadors, succeeded the bustling crowd. Each time a company passed, Passepartout chuckled, and said to himself: "Good ! another Japanese embassy departing for Europe !"

CHAPTER XXIII

IN WHICH PASSEPARTOUT'S NOSE BECOMES OUTRAGEOUSLY LONG

The next morning poor, jaded, famished Passepartout said to himself that he must get something to eat at all hazards, and the sooner he did so the better. He might, indeed, sell his watch ; but he would have starved first. Now or never he must use the strong, if not melodious voice which nature had bestowed upon him. He knew several French and English songs, and resolved to try them upon the Japanese, who must be lovers of music, since they were for ever pounding on their cymbals, tam-tams, and tambourines, and could not but appreciate European talent.

It was, perhaps, rather early in the morning to get up a concert, and the audience prematurely aroused from their slumbers, might not possibly pay their entertainer with coin bearing the Mikado's features. Passepartout therefore decided to wait several hours ; and, as he was sauntering along, it occurred to him that he would seem rather too well dressed for a wandering artist. The idea struck him to change his garments for clothes more in harmony with his project ; by which he might also get a little money to satisfy the immediate cravings of hunger. The resolution taken, it remained to carry it out.

It was only after a long search that Passepartout discovered a native dealer in old clothes, to whom he applied for an exchange. The man liked the European costume, and ere long Passepartout issued from his shop accoutred in an old Japanese coat, and a sort of one-sided turban, faded with long use. A few small pieces of silver, moreover, jingled in his pocket.

"Good!" thought he. "I will imagine I am at the Carnival!"

His first care, after being thus "Japanesed," was to enter a tea-house of modest appearance, and, upon half a bird and a little rice, to breakfast like a man for whom dinner was as yet a problem to be solved.

"Now," thought he, when he had eaten heartily, "I mustn't lose my head. I can't sell this costume again for one still more Japanese. I must consider how to leave this country of the Sun, of which I shall not retain the most delightful of memories, as quickly as possible."

It occurred to him to visit the steamers which were about to leave for America. He would offer himself as a cook or servant, in payment of his passage and meals. Once at San Francisco, he would find some means of going on. The difficulty was, how to traverse the four thousand seven hundred miles of the Pacific which lay between Japan and the New World.

Passepartout was not the man to let an idea go begging, and directed his steps towards the docks. But, as he approached them, his project, which at first had seemed so simple, began to grow more and more formidable to his mind. What need would they have of a cook or servant on an American steamer, and what confidence would they put in him, dressed as he was? What references could he give?

As he was reflecting in this wise, his eyes fell upon an immense placard which a sort of clown was carrying through the streets. This placard, which was in English, read as follows :

ACROBATIC JAPANESE TROUPE,
HONOURABLE WILLIAM BATULCAR, PROPRIETOR,
LAST REPRESENTATIONS,
PRIOR TO THEIR DEPARTURE TO THE UNITED STATES,
OF THE
LONG NOSES ! LONG NOSES !
UNDER THE DIRECT PATRONAGE OF THE GOD TINGOU !
GREAT ATTRACTION !

"The United States!" said Passepartout; "that's just what I want!"

He followed the clown, and soon found himself once more in the Japanese quarter. A quarter of an hour later he stopped before a large cabin, adorned with several clusters of streamers, the exterior walls of which were designed to represent, in violent colours and without perspective, a company of jugglers.

This was the Honourable William Batulcar's establishment. That gentleman was a sort of Barnum, the director of a troupe of mountebanks, jugglers, clowns, acrobats, equilibrists, and gymnasts, who, according to the placard, was giving his last performances before leaving the Empire of the Sun for the States of the Union.

Passepartout entered and asked for Mr. Batulcar, who straightway appeared in person.

"What do you want?" said he to Passepartout, whom he at first took for a native.

"Would you like a servant, sir?" asked Passepartout.

"A servant!" cried Mr. Batulcar, caressing the thick grey beard which hung from his chin. "I already have two who are obedient and faithful, have never left me, and serve me for their nourishment—and here they are," added he, holding out his two robust arms, furrowed with veins as large as the strings of a bass-viol.

"So I can be of no use to you?"

"None."

"The devil! I should so like to cross the Pacific with you!"

"Ah!" said the Honourable Mr. Batulcar. "You are no more a Japanese than I am a monkey! Why are you dressed up in that way?"

"A man dresses as he can."

"That's true. You are a Frenchman, aren't you?"

"Yes; a Parisian of Paris."

"Then you ought to know how to make grimaces?"

"Why," replied Passepartout, a little vexed that his nationality should cause this question, "we Frenchmen

know how to make grimaces, it is true—but not any better than the Americans do.”

“ True. Well, if I can’t take you as a servant, I can as a clown. You see, my friend, in France they exhibit foreign clowns, and in foreign parts French clowns.”

“ Ah ! ”

“ You are pretty strong, eh ? ”

“ Especially after a good meal.”

“ And you can sing ? ”

“ Yes,” returned Passepartout, who had formerly been wont to sing in the streets.

“ But can you sing standing on your head, with a top spinning on your left foot, and a sabre balanced on your right ? ”

“ Humph ! I think so,” replied Passepartout, recalling the exercises of his younger days.

“ Well, that’s enough,” said the Honourable William Batulcar.

The engagement was concluded there and then.

Passepartout had at last found something to do. He was engaged to act in the celebrated Japanese troupe. It was not a very dignified position, but within a week he would be on his way to San Francisco.

The performance, so noisily announced by the Honourable Mr. Batulcar, was to commence at three o’clock, and soon the deafening instruments of a Japanese orchestra resounded at the door. Passepartout, though he had not been able to study or rehearse a part, was designated to lend the aid of his sturdy shoulders in the great exhibition of the “ human pyramid,” executed by the Long Noses of the god Tingou. This “ great attraction ” was to close the performance.

Before three o’clock the large shed was invaded by the spectators, comprising Europeans and natives, Chinese and Japanese, men, women and children, who precipitated themselves upon the narrow benches and into the boxes opposite the stage. The musicians took up a position inside, and were vigorously performing on their gongs, tam-tams, flutes, bones, tambourines, and immense drums.

The performance was much like all acrobatic displays ; but it must be confessed that the Japanese are the first equilibrists in the world.

One, with a fan and some bits of paper, performed the graceful trick of the butterflies and the flowers ; another traced in the air, with the odorous smoke of his pipe, a series of blue words, which composed a compliment to the audience ; while a third juggled with some lighted candles, which he extinguished successively as they passed his lips, and relit again without interrupting for an instant his juggling. Another reproduced the most singular combinations with a spinning-top ; in his hands the revolving tops seemed to be animated with a life of their own in their interminable whirling ; they ran over pipe-stems, the edges of sabres, wires, and even hairs stretched across the stage ; they turned around on the edges of large glasses, crossed bamboo ladders, dispersed into all the corners, and produced strange musical effects by the combination of their various pitches of tone. The jugglers tossed them in the air, threw them like shuttlecocks with wooden battledores, and yet they kept on spinning ; they put them into their pockets, and took them out still whirling as before.

It is useless to describe the astonishing performances of the acrobats and gymnasts. The turning on ladders, poles, balls, barrels, &c., was executed with wonderful precision.

But the principal attraction was the exhibition of the Long Noses, a show to which Europe is as yet a stranger.

The Long Noses form a peculiar company, under the direct patronage of the god Tingou. Attired after the fashion of the Middle Ages, they bore upon their shoulders a splendid pair of wings ; but what especially distinguished them was the long noses which were fastened to their faces, and the uses which they made of them. These noses were made of bamboo, and were five, six, and even ten feet long, some straight, others curved, some ribboned, and some having imitation warts upon them. It was upon these appendages, fixed tightly on their real noses, that they performed their

gymnastic exercises. A dozen of these sectaries of Tingou lay flat upon their backs, while others, dressed to represent lightning-rods, came and frolicked on their noses, jumping from one to another, and performing the most skilful leaping and somersaults.

As a last scene, a "human pyramid" had been announced, in which fifty Long Noses were to represent the Car of Juggernaut. But, instead of forming a pyramid by mounting each other's shoulders, the artists were to group themselves on top of the noses. It happened that the performer who had hitherto formed the base of the Car had quitted the troupe, and as, to fill this part, only strength and adroitness were necessary, Passepartout had been chosen to take his place.

The poor fellow really felt sad when—melancholy reminiscence of his youth!—he donned his costume, adorned with vari-coloured wings, and fastened to his natural feature a false nose six feet long. But he cheered up when he thought that this nose was winning him something to eat.

He went upon the stage, and took his place beside the rest who were to compose the base of the Car of Juggernaut. They all stretched themselves on the floor, their noses pointing to the ceiling. A second group of artists disposed themselves on these long appendages, then a third above these, then a fourth, until a human monument reaching to the very cornices of the theatre soon arose on top of the noses. This elicited loud applause, in the midst of which the orchestra was just striking up a deafening air, when the pyramid tottered, the balance was lost, one of the lower noses vanished from the pyramid, and the human monument was shattered like a castle built of cards!

It was Passepartout's fault. Abandoning his position, clearing the footlights without the aid of his wings, and, clambering up to the right-hand gallery, he fell at the feet of one of the spectators, crying, "Ah, my master! my master!"

"You here?"

“ Myself.”

“ Very well ; then let us go to the steamer, young man ! ”

Mr. Fogg, Aouda, and Passepartout passed through the lobby of the theatre to the outside, where they encountered the Honourable Mr. Batulcar, furious with rage. He demanded damages for the “ breakage ” of the pyramid ; and Phileas Fogg appeased him by giving him a handful of banknotes.

At half-past six, the very hour of departure, Mr. Fogg and Aouda, followed by Passepartout, who in his hurry had retained his wings, and nose six feet long, stepped upon the American steamer.

CHAPTER XXIV

DURING WHICH MR. FOGG AND PARTY CROSS THE PACIFIC OCEAN

What happened when the pilot-boat came in sight of Shanghai will be easily guessed. The signals made by the *Tankadere* had been seen by the captain of the Yokohama steamer, who, espying the flag at half-mast, had directed his course towards the little craft. Phileas Fogg, after paying the stipulated price of his passage to John Bunsby, and rewarding that worthy with the additional sum of five hundred and fifty pounds, ascended the steamer with Aouda and Fix ; and they started at once for Nagasaki and Yokohama.

They reached their destination on the morning of the 14th of November. Phileas Fogg lost no time in going on board the *Carnatic*, where he learned, to Aouda's great delight—and perhaps to his own, though he betrayed no emotion—that Passepartout, a Frenchman, had really arrived on her the day before.

The San Francisco steamer was announced to leave that very evening, and it became necessary to find Passepartout,

if possible, without delay. Mr. Fogg applied in vain to the French and English consuls, and, after wandering through the streets a long time, began to despair of finding his missing servant. Chance, or perhaps a kind of presentiment, at last led him into the Honourable Mr. Batulcar's theatre. He certainly would not have recognised Passepartout in the eccentric mountebank's costume ; but the latter, lying on his back, perceived his master in the gallery. He could not help starting, which so changed the position of his nose as to bring the "pyramid" pell-mell upon the stage.

All this Passepartout learned from Aouda, who recounted to him what had taken place on the voyage from Hong Kong to Shanghai on the *Tankadere*, in company with one Mr. Fix.

Passepartout did not change countenance on hearing this name. He thought that the time had not yet arrived to divulge to his master what had taken place between the detective and himself ; and, in the account he gave of his absence, he simply excused himself for having been overtaken by drunkenness, in smoking opium at a tavern in Hong Kong.

Mr. Fogg heard this narrative coldly, without a word ; and then furnished his man with funds necessary to obtain clothing more in harmony with his position. Within an hour the Frenchman had cut off his nose and parted with his wings, and retained nothing about him which recalled the sectary of the god Tingou.

The steamer which was about to depart from Yokohama to San Francisco belonged to the Pacific Mail Steamship Company, and was named the *General Grant*. She was a large paddle-wheel steamer of two thousand five hundred tons, well equipped and very fast. The massive walking-beam rose and fell above the deck ; at one end a piston-rod worked up and down ; and at the other was a connecting-rod which, in changing the rectilinear motion to a circular one, was directly connected with the shaft of the paddles. The *General Grant* was rigged with three masts,

giving a large capacity for sails, and thus materially aiding the steam power. By making twelve miles an hour, she would cross the ocean in twenty-one days. Phileas Fogg was therefore justified in hoping that he would reach San Francisco by the 2nd of December, New York by the 11th, and London on the 20th—thus gaining several hours on the fatal date of the 21st of December.

There was a full complement of passengers on board, among them English, many Americans, a large number of coolies on their way to California, and several East Indian officers, who were spending their vacation in making the tour of the world. Nothing of moment happened on the voyage ; the steamer, sustained on its large paddles, rolled but little, and the Pacific almost justified its name. Mr. Fogg was as calm and taciturn as ever. His young companion felt herself more and more attached to him by other ties than gratitude ; his silent but generous nature impressed her more than she thought ; and it was almost unconsciously that she yielded to emotions which did not seem to have the least effect upon her protector. Aouda took the keenest interest in his plans, and became impatient at any incident which seemed likely to retard his journey.

She often chatted with Passepartout, who did not fail to perceive the state of the lady's heart ; and, being the most faithful of domestics, he never exhausted his eulogies of Phileas Fogg's honesty, generosity, and devotion. He took pains to calm Aouda's doubts of a successful termination of the journey, telling her that the most difficult part of it had passed, that now they were beyond the fantastic countries of Japan and China, and were fairly on their way to civilised places again. A railway train from San Francisco to New York, and a transatlantic steamer from New York to Liverpool, would doubtless bring them to the end of this impossible journey round the world within the period agreed upon.

On the ninth day after leaving Yokohama, Phileas Fogg had traversed exactly one half of the terrestrial globe. The

General Grant passed, on the 23rd of November, the one hundred and eightieth meridian, and was at the very antipodes of London. Mr. Fogg had, it is true, exhausted fifty-two of the eighty days in which he was to complete the tour, and there were only twenty-eight left. But, though he was only half-way by the difference of meridians, he had really gone over two-thirds of the whole journey ; for he had been obliged to make long circuits from London to Aden, from Aden to Bombay, from Calcutta to Singapore, and from Singapore to Yokohama. Could he have followed without deviation the fiftieth parallel, which is that of London, the whole distance would only have been about twelve thousand miles ; whereas he would be forced, by the irregular methods of locomotion, to traverse twenty-six thousand, of which he had, on the 23rd of November, accomplished seventeen thousand five hundred. And now the course was a straight one, and Fix was no longer there to put obstacles in their way !

It happened also, on the 23rd of November, that *Passepartout* made a joyful discovery. It will be remembered that the obstinate fellow had insisted on keeping his famous family watch at London time, and on regarding that of the countries he had passed through as quite false and unreliable. Now, on this day, though he had not changed the hands, he found that his watch exactly agreed with the ship's chronometers. His triumph was hilarious. He would have liked to know what Fix would say if he were aboard !

"The rogue told me a lot of stories," repeated *Passepartout*, "about the meridians, the sun, and the moon ! Moon, indeed ! moonshine more likely ! If one listened to that sort of people, a pretty sort of time one would keep ! I was sure that the sun would some day regulate itself by my watch !"

Passepartout was ignorant that, if the face of his watch had been divided into twenty-four hours, like the Italian clocks, he would have no reason for exultation ; for the hands of his watch would then, instead of as now indicating

nine o'clock in the morning, indicate nine o'clock in the evening, that is, the twenty-first hour after midnight—precisely the difference between London time and that of the one hundred and eightieth meridian. But if Fix had been able to explain this purely physical effect, Passepartout would not have admitted, even if he had comprehended it. Moreover, if the detective had been on board at that moment, Passepartout would have joined issue with him on a quite different subject, and in an entirely different manner.

Where was Fix at that moment?

He was actually on board the *General Grant*.

On reaching Yokohama, the detective, leaving Mr. Fogg, whom he expected to meet again during the day, had repaired at once to the English consulate, where he at last found the warrant of arrest. It had followed him from Bombay, and had come by the *Carnatic*, on which steamer he himself was supposed to be. Fix's disappointment may be imagined when he reflected that the warrant was now useless. Mr. Fogg had left English ground, and it was now necessary to procure his extradition!

"Well," thought Fix, after a moment of anger, "my warrant is not good here, but it will be in England. The rogue evidently intends to return to his own country, thinking he has thrown the police off his track. Good! I will follow him across the Atlantic. As for the money, heaven grant there may be some left! But the fellow has already spent in travelling, rewards, trials, bail, elephants, and all sorts of charges, more than five thousand pounds. Yet, after all, the Bank is rich!"

His course decided on, he went on board the *General Grant*, and was there when Mr. Fogg and Aouda arrived. To his utter amazement, he recognised Passepartout, despite his theatrical disguise. He quickly concealed himself in his cabin, to avoid an awkward explanation, and hoped—thanks to the number of passengers—to remain unperceived by Mr. Fogg's servant.

On that very day, however, he met Passepartout face to face on the forward deck. The latter, without a word, made a rush for him, grasped him by the throat, and, much to the amusement of a group of Americans, who immediately began to bet on him, administered to the detective a perfect volley of blows, which proved the great superiority of French over English pugilistic skill.

When Passepartout had finished, he found himself relieved and comforted. Fix got up in a somewhat rumpled condition, and, looking at his adversary, coldly said, "Have you done?"

"For this time—yes."

"Then let me have a word with you."

"But I——"

"In your master's interests."

Passepartout seemed to be vanquished by Fix's coolness, for he quietly followed him, and they sat down aside from the rest of the passengers.

"You have given me a thrashing," said Fix. "Good, I expected it. Now, listen to me. Up to this time I have been Mr. Fogg's adversary. I am now in his game."

"Aha!" cried Passepartout; "you are convinced he is an honest man?"

"No," replied Fix coldly, "I think him a rascal. Sh! don't budge, and let me speak. As long as Mr. Fogg was on English ground, it was for my interest to detain him there until my warrant of arrest arrived. I did everything I could to keep him back. I sent the Bombay priests after him, I got you intoxicated at Hong Kong, I separated you from him, and I made him miss the Yokohama steamer."

Passepartout listened, with closed fists.

"Now," resumed Fix, "Mr. Fogg seems to be going back to England. Well, I will follow him there. But hereafter I will do as much to keep obstacles out of his way as I have done up to this time to put them in his path. I've changed my game, you see, and simply because it was for my interest to change it. Your interest is the same as mine ;

for it is only in England that you will ascertain whether you are in the service of a criminal or an honest man."

Passepartout listened very attentively to Fix, and was convinced that he spoke with entire good faith.

"Are we friends?" asked the detective.

"Friends?—no," replied Passepartout; "but allies, perhaps. At the least sign of treason, however, I'll twist your neck for you."

"Agreed," said the detective quietly.

Eleven days later, on the 3rd of December, the *General Grant* entered the bay of the Golden Gate, and reached San Francisco.

Mr. Fogg had neither gained nor lost a single day.

CHAPTER XXV

IN WHICH A SLIGHT GLIMPSE IS HAD OF SAN FRANCISCO

It was seven in the morning when Mr. Fogg, Aouda, and Passepartout set foot upon the American continent, if this name can be given to the floating quay upon which they disembarked. These quays, rising and falling with the tide, thus facilitate the loading and unloading of vessels. Alongside them were clippers of all sizes, steamers of all nationalities, and the steamboats, with several decks rising one above the other, which ply on the Sacramento and its tributaries. There were also heaped up the products of a commerce which extends to Mexico, Chili, Peru, Brazil, Europe, Asia, and all the Pacific islands.

Passepartout, in his joy on reaching at last the American continent, thought he would manifest it by executing a perilous vault in fine style; but, tumbling upon some worm-eaten planks, he fell through them. Put out of countenance by the manner in which he thus "set foot" upon the New World, he uttered a loud cry, which so frightened the

innumerable cormorants and pelicans that are always perched upon these movable quays, that they flew noisily away.

Mr. Fogg, on reaching shore, proceeded to find out at what hour the first train left for New York, and learned that this was at six o'clock p.m. ; he had, therefore, an entire day to spend in the Californian capital. Taking a carriage at a charge of three dollars, he and Aouda entered it, while Passepartout mounted the box beside the driver, and they set out for the International Hotel.

From his exalted position Passepartout observed with much curiosity the wide streets, the low, evenly ranged houses, the Anglo-Saxon Gothic churches, the great docks, the palatial wooden and brick warehouses, the numerous conveyances, omnibuses, horse-cars, and upon the side-walks, not only Americans and Europeans, but Chinese and Indians. Passepartout was surprised at all he saw. San Francisco was no longer the legendary city of 1849—a city of banditti, assassins, and incendiaries, who had flocked hither in crowds in pursuit of plunder ; a paradise of outlaws, where they gambled with gold-dust, a revolver in one hand and a bowie-knife in the other : it was now a great commercial emporium.

The lofty tower of its City Hall overlooked the whole panorama of the streets and avenues, which cut each other at right-angles, and in the midst of which appeared pleasant, verdant squares, while beyond appeared the Chinese quarter, seemingly imported from the Celestial Empire in a toy-box. Sombreros and red shirts and plumed Indians were rarely to be seen ; but there were silk hats and black coats everywhere worn by a multitude of nervously active, gentlemanly-looking men. Some of the streets—especially Montgomery Street, which is to San Francisco what Regent Street is to London, the Boulevard des Italiens to Paris, and Broadway to New York—were lined with splendid and spacious stores, which exposed in their windows the products of the entire world.

When Passepartout reached the International Hotel, it did not seem to him as if he had left England at all.

The ground floor of the hotel was occupied by a large bar, a sort of restaurant freely open to all passers-by, who might partake of dried beef, oyster soup, biscuits, and cheese, without taking out their purses. Payment was made only for the ale, porter, or sherry which was drunk. This seemed "very American" to Passepartout. The hotel refreshment-rooms were comfortable, and Mr. Fogg and Aouda, installing themselves at a table, were abundantly served on diminutive plates by negroes of darkest hue.

After breakfast, Mr. Fogg, accompanied by Aouda, started for the English consulate to have his passport visaed. As he was going out, he met Passepartout, who asked him if it would not be well, before taking the train, to purchase some dozens of Enfield rifles and Colt's revolvers. He had been listening to stories of attacks upon the trains by the Sioux and Pawnees. Mr. Fogg thought it a useless precaution, but told him to do as he thought best, and went on to the consulate.

He had not proceeded two hundred steps, however, when, "by the greatest chance in the world," he met Fix. The detective seemed wholly taken by surprise. What ! Had Mr. Fogg and himself crossed the Pacific together, and not met on the steamer ! At least Fix felt honoured to behold once more the gentleman to whom he owed so much, and, as his business recalled him to Europe, he should be delighted to continue the journey in such pleasant company.

Mr. Fogg replied that the honour would be his ; and the detective—who was determined not to lose sight of him—begged permission to accompany them in their walk about San Francisco—a request which Mr. Fogg readily granted.

They soon found themselves in Montgomery Street, where a great crowd was collected ; the side-walks, street, horse-car rails, the shop-doors, the windows of the houses, and even the roofs, were full of people. Men were going about carrying large posters, and flags and streamers were floating in the wind ; while loud cries were heard on every hand.

" Hurrah for Camerfield ! "

“Hurrah for Mandiboy !”

It was a political meeting ; at least so Fix conjectured, who said to Mr. Fogg, “ Perhaps we had better not mingle with the crowd. There may be danger in it.”

“ Yes,” returned Mr. Fogg ; “ and blows, even if they are political are still blows.”

Fix smiled at this remark ; and, in order to be able to see without being jostled about, the party took up a position on the top of a flight of steps situated at the upper end of Montgomery Street. Opposite them, on the other side of the street, between a coal wharf and a petroleum warehouse, a large platform had been erected in the open air, towards which the current of the crowd seemed to be directed.

For what purpose was this meeting ? What was the occasion of this excited assemblage ? Phileas Fogg could not imagine. Was it to nominate some high official—a governor or member of Congress ? It was not improbable, so agitated was the multitude before them.

Just at this moment there was an unusual stir in the human mass. All the hands were raised in the air. Some, tightly closed, seemed to disappear suddenly in the midst of the cries—an energetic way, no doubt, of casting a vote. The crowd swayed back, the banners and flags wavered, disappeared an instant, then reappeared in tatters. The undulations of the human surge reached the steps, while all the heads floundered on the surface like a sea agitated by a squall. Many of the black hats disappeared, and the greater part of the crowd seemed to have diminished in height.

“ It is evidently a meeting,” said Fix, “ and its object must be an exciting one. I should not wonder if it were about the *Alabama*, despite the fact that that question is settled.”

“ Perhaps,” replied Mr. Fogg, simply.

“ At least, there are two champions in presence of each other, the Honourable Mr. Camerfield and the Honourable Mr. Mandiboy.”

Aouda, leaning upon Mr. Fogg’s arm, observed the tumultuous scene with surprise, while Fix asked a man near

him what the cause of it all was. Before the man could reply, a fresh agitation arose ; hurrahs and excited shouts were heard ; the staffs of the banners began to be used as offensive weapons ; and fists flew about in every direction. Thumps were exchanged from the tops of the carriages and omnibuses which had been blocked up in the crowd. Boots and shoes went whirling through the air, and Mr. Fogg thought he even heard the crack of revolvers mingling in the din, the rout approached the stairway, and flowed over the lower step. One of the parties had evidently been repulsed ; but the mere lookers-on could not tell whether Mandiboy or Camerfield had gained the upper hand.

“ It would be prudent for us to retire,” said Fix, who was anxious that Mr. Fogg should not receive any injury, at least until they got back to London. “ If there is any question about England in all this, and we were recognised, I fear it would go hard with us.”

“ An English subject——” began Mr. Fogg.

He did not finish his sentence ; for a terrific hubbub now arose on the terrace behind the flight of steps where they stood, and there were frantic shouts of, “ Hurrah for Mandiboy ! Hip, hip, hurrah ! ”

It was a band of voters coming to the rescue of their allies, and taking the Camerfield forces in flank. Mr. Fogg, Aouda, and Fix found themselves between two fires ; it was too late to escape. The torrent of men, armed with loaded canes and sticks, was irresistible. Phileas Fogg and Fix were roughly hustled in their attempts to protect their fair companion ; the former, as cool as ever, tried to defend himself with the weapons which nature has placed at the end of every Englishman’s arm, but in vain. A big brawny fellow with a red beard, flushed face, and broad shoulders, who seemed to be the chief of the band, raised his clenched fist to strike Mr. Fogg, whom he would have given a crushing blow, had not Fix rushed in and received it in his stead. An enormous bruise immediately made its appearance under the detective’s silk hat, which was completely smashed in.

"Yankee!" exclaimed Mr. Fogg, darting a contemptuous look at the ruffian.

"Englishman!" returned the other. "We will meet again!"

"When you please."

"What is your name?"

"Phileas Fogg. And yours?"

"Colonel Stamp Proctor."

The human tide now swept by, after overturning Fix, who speedily got upon his feet again, though with tattered clothes. Happily, he was not seriously hurt. His travelling overcoat was divided into two unequal parts, and his trousers resembled those of certain Indians, which fit less compactly than they are easy to put on. Aouda had escaped unharmed, and Fix alone bore marks of the fray in his black and blue bruise.

"Thanks," said Mr. Fogg to the detective, as soon as they were out of the crowd.

"No thanks are necessary," replied Fix; "but let us go."

"Where?"

"To a tailor's."

Such a visit was, indeed, opportune. The clothing of both Mr. Fogg and Fix was in rags, as if they had themselves been actively engaged in the contest between Camerfield and Mandiboy. An hour after, they were once more suitably attired, and with Aouda returned to the International Hotel.

Passepartout was waiting for his master, armed with half a dozen six-barrelled revolvers. When he perceived Fix, he knit his brows; but Aouda having, in a few words, told him of their adventure, his countenance resumed its placid expression. Fix evidently was no longer an enemy, but an ally; he was faithfully keeping his word.

Dinner over, the coach which was to convey the passengers and their luggage to the station drew up to the door. As he was getting in, Mr. Fogg said to Fix, "You have not seen this Colonel Proctor again?"

"No."

"I will come back to America to find him," said Phileas Fogg calmly. "It would not be right for an Englishman to permit himself to be treated in that way, without retaliating."

The detective smiled, but did not reply. It was clear that Mr. Fogg was one of those Englishmen who, while they do not tolerate duelling at home, fight abroad when their honour is attacked.

At a quarter before six the travellers reached the station, and found the train ready to depart. As he was about to enter it, Mr. Fogg called a porter, and said to him: "My friend, was there not some trouble to-day in San Francisco?"

"It was a political meeting, sir," replied the porter.

"But I thought there was a great deal of disturbance in the streets."

"It was only a meeting assembled for an election."

"The election of a general-in-chief, no doubt?" asked Mr. Fogg.

"No, sir; of a justice of the peace."

Phileas Fogg got into the train, which started off at full speed.

CHAPTER XXVI

IN WHICH PHILEAS FOGG AND PARTY TRAVEL BY
THE PACIFIC RAILROAD

"From ocean to ocean"—so say the Americans; and these four words compose the general designation of the "great trunk line" which crosses the entire width of the United States. The Pacific Railroad is, however, really divided into two distinct lines: the Central Pacific, between San Francisco and Ogden, and the Union Pacific, between Ogden and Omaha. Five main lines connect Omaha with New York.

New York and San Francisco are thus united by an uninterrupted metal ribbon, which measures no less than three

thousand seven hundred and eighty-six miles. Between Omaha and the Pacific the railway crosses a territory which is still infested by Indians and wild beasts, and a large tract which the Mormons, after they were driven from Illinois in 1845, began to colonise.

The journey from New York to San Francisco consumed, formerly, under the most favourable conditions, at least six months. It is now accomplished in seven days.

It was in 1862 that, in spite of the Southern Members of Congress, who wished a more southerly route, it was decided to lay the road between the forty-first and forty-second parallels. President Lincoln himself fixed the end of the line at Omaha, in Nebraska. The work was at once commenced, and pursued with true American energy ; nor did the rapidity with which it went on injuriously affect its good execution. The road grew, on the prairies, a mile and a half a day. A locomotive, running on the rails laid down the evening before, brought the rails to be laid on the morrow, and advanced upon them as fast as they were put in position.

The Pacific Railroad is joined by several branches in Iowa, Kansas, Colorado, and Oregon. On leaving Omaha, it passes along the left bank of the Platte River as far as the junction of its northern branch, follows its southern branch, crosses the Laramie territory and the Wahsatch Mountains, turns the Great Salt Lake, and reaches Salt Lake City, the Mormon capital, plunges into the Tuilla Valley, across the American Desert, Cedar and Humboldt Mountains, the Sierra Nevada, and descends, via Sacramento, to the Pacific—its grade, even on the Rocky Mountains, never exceeding one hundred and twelve feet to the mile.

Such was the road to be traversed in seven days, which would enable Phileas Fogg—at least, so he hoped—to take the Atlantic steamer at New York on the 11th for Liverpool.

The car which he occupied was a sort of long omnibus on eight wheels, and with no compartments in the interior.

It was supplied with two rows of seats, perpendicular to the direction of the train on either side of an aisle which conducted to the front and rear platforms. These platforms were found throughout the train, and the passengers were able to pass from one end of the train to the other. It was supplied with saloon cars, balcony cars, restaurants, and smoking-cars ; theatre cars alone were wanting, and they will have these some day.

Book and news dealers, sellers of edibles, drinkables, and cigars, who seemed to have plenty of customers, were continually circulating in the aisles.

The train left Oakland station at six o'clock. It was already night, cold and cheerless, the heavens being overcast with clouds which seemed to threaten snow. The train did not proceed rapidly ; counting the stoppages, it did not run more than twenty miles an hour, which was a sufficient speed, however, to enable it to reach Omaha within its designated time.

There was but little conversation in the car, and soon many of the passengers were overcome with sleep. Passepartout found himself beside the detective ; but he did not talk to him. After recent events, their relations with each other had grown somewhat cold ; there could no longer be mutual sympathy or intimacy between them. Fix's manner had not changed ; but Passepartout was very reserved, and ready to strangle his former friend on the slightest provocation.

Snow began to fall an hour after they started, a fine snow, however, which happily could not obstruct the train ; nothing could be seen from the windows but a vast, white sheet, against which the smoke of the locomotive had a greyish aspect.

At eight o'clock a steward entered the car and announced that the time for going to bed had arrived ; and in a few minutes the car was transformed into a dormitory. The backs of the seats were thrown back, bedsteads carefully packed were rolled out by an ingenious system, berths were

suddenly improvised, and each traveller had soon at his disposition a comfortable bed, protected from curious eyes by thick curtains. The sheets were clean and the pillows soft. It only remained to go to bed and sleep—which everybody did—while the train sped on across the State of California.

The country between San Francisco and Sacramento is not very hilly. The Central Pacific, taking Sacramento for its starting-point, extends eastward to meet the road from Omaha. The line from San Francisco to Sacramento runs in a north-easterly direction, along the American River, which empties into San Pablo Bay. The one hundred and twenty miles between these cities were accomplished in six hours, and towards midnight, while fast asleep, the travellers passed through Sacramento ; so that they saw nothing of that important place, the seat of the State government, with its fine quays, its broad streets, its noble hotels, square, and churches.

The train, on leaving Sacramento, and passing the junction, Roclin, Auburn, and Colfax, entered the range of the Sierra Nevada. Cisco was reached at seven in the morning ; and an hour later the dormitory was transformed into an ordinary car, and the travellers could observe the picturesque beauties of the mountain region through which they were steaming. The railway track wound in and out among the passes, now approaching the mountain-sides, now suspended over precipices, avoiding abrupt angles by bold curves, plunging into narrow defiles, which seemed to have no outlet. The locomotive, its great funnel emitting a weird light, with its sharp bell, and its cow-catcher extended like a spur, mingled its shrieks and bellowings with the noise of torrents and cascades, and twined its smoke among the branches of the gigantic pines.

There were few or no bridges or tunnels on the route. The railway turned around the sides of the mountains, and did not attempt to violate nature by taking the shortest cut from one point to another.

The train entered the State of Nevada through the

Carson Valley about nine o'clock, going always north-easterly ; and at midday reached Reno, where there was a delay of twenty minutes for breakfast.

From this point the road, running along Humboldt River, passed northward for several miles by its banks ; then it turned eastward, and kept by the river until it reached the Humboldt Range, nearly at the extreme eastern limit of Nevada.

Having breakfasted, Mr. Fogg and his companions resumed their places in the car, and observed the varied landscape which unfolded itself as they passed along : the vast prairies, the mountains lining the horizon, and the creeks, with their frothy, foaming streams. Sometimes a great herd of buffaloes, massing together in the distance, seemed like a movable dam. These innumerable multitudes of ruminating beasts often form an insurmountable obstacle to the passage of the trains ; thousands of them have been seen passing over the track for hours together, in compact ranks. The locomotive is then forced to stop and wait till the road is once more clear.

This happened, indeed, to the train in which Mr. Fogg was travelling. About twelve o'clock a troop of ten or twelve thousand head of buffalo encumbered the track. The locomotive, slackening its speed, tried to clear the way with its cow-catcher ; but the mass of animals was too great. The buffaloes marched along with a tranquil gait, uttering now and then deafening bellowings. There was no use of interrupting them, for, having taken a particular direction, nothing can moderate and change their course ; it is a torrent of living flesh which no dam could contain.

The travellers gazed on this curious spectacle from the platforms ; but Phileas Fogg, who had the most reason of all to be in a hurry, remained in his seat, and waited philosophically until it should please the buffaloes to get out of the way.

Passepartout was furious at the delay they occasioned, and longed to discharge his arsenal of revolvers upon them.

“What a country !” cried he. “Mere cattle stop the trains, and go by in a procession, just as if they were not impeding travel ! *Parbleu !* I should like to know if Mr. Fogg foresaw *this* mishap in his programme ! And here’s an engineer who doesn’t dare to run the locomotive into this herd of beasts !”

The engineer did not try to overcome the obstacle, and he was wise. He would have crushed the first buffaloes, no doubt, with the cow-catcher ; but the locomotive, however powerful, would soon have been checked, the train would inevitably have been thrown off the track, and would then have been helpless.

The best course was to wait patiently, and regain the lost time by greater speed when the obstacle was removed. The procession of buffaloes lasted three full hours, and it was night before the track was clear. The last ranks of the herd were now passing over the rails, while the first had already disappeared below the southern horizon.

It was eight o’clock when the train passed through the defiles of the Humboldt Range, and half-past nine when it penetrated Utah, the region of the Great Salt Lake, the singular colony of the Mormons.

CHAPTER XXVII

IN WHICH PASSEPARTOUT UNDERGOES, AT A SPEED OF TWENTY MILES AN HOUR, A COURSE OF MORMON HISTORY

During the night of the 5th of December, the train ran south-easterly for about fifty miles ; then rose an equal distance in a north-easterly direction, towards the Great Salt Lake.

Passepartout, about nine o’clock, went out upon the platform to take the air. The weather was cold, the heavens grey, but it was not snowing. The sun’s disc, enlarged by

the mist, seemed an enormous ring of gold, and Passepartout was amusing himself by calculating its value in pounds sterling, when he was diverted from this interesting study by a strange-looking personage who made his appearance on the platform.

This personage, who had taken the train at Elko, was tall and dark, with black moustache, black stockings, a black silk hat, a black waistcoat, black trousers, a white cravat, and dogskin gloves. He might have been taken for a clergyman. He went from one end of the train to the other, and affixed to the door of each car a notice written in manuscript.

Passepartout approached and read one of these notices, which stated that Elder William Hitch, Mormon missionary, taking advantage of his presence on train No. 48, would deliver a lecture on Mormonism in car No. 117, from eleven to twelve o'clock ; and that he invited all who were desirous of being instructed concerning the mysteries of the religion of the " Latter Day Saints " to attend.

" I'll go," said Passepartout to himself. He knew nothing of Mormonism except the custom of polygamy, which is its foundation.

The news quickly spread through the train, which contained about one hundred passengers, thirty of whom, at most, attracted by the notice, ensconced themselves in car No. 117. Passepartout took one of the front seats. Neither Mr. Fogg nor Fix cared to attend.

At the appointed hour Elder William Hitch rose, and, in an irritated voice, as if he had already been contradicted, said, " I tell you that Joe Smith is a martyr, that his brother Hiram is a martyr, and that the persecutions of the United States Government against the prophets will also make a martyr of Brigham Young. Who dares to say the contrary ? "

No one ventured to gainsay the missionary, whose excited tone contrasted curiously with his naturally calm visage. No doubt his anger arose from the hardships to which the Mormons were actually subjected. The government had

just succeeded, with some difficulty, in reducing these independent fanatics to its rule. It had made itself master of Utah, and subjected that territory to the laws of the Union, after imprisoning Brigham Young on a charge of rebellion and polygamy. The disciples of the prophet had since redoubled their efforts, and resisted, by words at least, the authority of Congress. Elder Hitch, as is seen, was trying to make proselytes on the very railway trains.

Then, emphasising his words with his loud voice and frequent gestures, he related the history of the Mormons from Biblical times : how that, in Israel, a Mormon prophet of the tribe of Joseph published the annals of the new religion, and bequeathed them to his son Mormon ; how, many centuries later, a translation of this precious book, which was written in Egyptian, was made by Joseph Smith, junior, a Vermont farmer, who revealed himself as a mystical prophet in 1825 ; and how, in short, the celestial messenger appeared to him in an illuminated forest, and gave him the annals of the Lord.

Several of the audience, not being much interested in the missionary's narrative, here left the car ; but Elder Hitch, continuing his lecture, related how Smith, junior, with his father, two brothers, and a few disciples, founded the church of the " Latter Day Saints," which, adopted not only in America, but in England, Norway and Sweden, and Germany, counts many artisans, as well as men engaged in the liberal professions, among its members ; how a colony was established in Ohio, a temple erected there at a cost of two hundred thousand dollars, and a town built at Kirkland ; how Smith became an enterprising banker, and received from a simple mummy showman a papyrus scroll written by Abraham and several famous Egyptians.

The Elder's story became somewhat wearisome, and his audience grew gradually less, until it was reduced to twenty passengers. But this did not disconcert the enthusiast, who proceeded with the story of Joseph Smith's bankruptcy in 1837, and how his ruined creditors gave him a coat of tar

and feathers ; his reappearance some years afterwards, more honourable and honoured than ever, at Independence, Missouri, the chief of a flourishing colony of three thousand disciples, and his pursuit thence by outraged Gentiles, and retirement into the Far West.

Ten hearers only were now left, among them honest Passepartout, who was listening with all his ears. Thus he learned that, after long persecutions, Smith reappeared in Illinois, and in 1839 founded a community at Nauvoo, on the Mississippi, numbering twenty-five thousand souls, of which he became mayor, chief justice, and general-in-chief ; that he announced himself, in 1843, as a candidate for the Presidency of the United States ; and that finally, being drawn into ambuscade at Carthage, he was thrown into prison, and assassinated by a band of men disguised in masks.

Passepartout was now the only person left in the car, and the Elder, looking him full in the face, reminded him that, two years after the assassination of Joseph Smith, the inspired prophet, Brigham Young, his successor, left Nauvoo for the banks of the Great Salt Lake, where, in the midst of that fertile region, directly on the route of the emigrants who crossed Utah on their way to California, the new colony, thanks to the polygamy practised by the Mormons, had flourished beyond expectations.

"And this," added Elder William Hitch, "this is why the jealousy of Congress has been aroused against us ! Why have the soldiers of the Union invaded the soil of Utah ? Why has Brigham Young, our chief, been imprisoned, in contempt of all justice ? Shall we yield to force ? Never ! Driven from Vermont, driven from Illinois, driven from Ohio, driven from Missouri, driven from Utah, we shall yet find some independent territory on which to plant our tents. And you, my brother," continued the Elder, fixing his angry eyes upon his single auditor, "will you not plant yours there, too, under the shadow of our flag ?"

"No !" replied Passepartout courageously, in his turn

retiring from the car, and leaving the Elder to preach to vacancy.

During the lecture the train had been making good progress, and towards half-past twelve it reached the north-west border of the Great Salt Lake. Thence the passengers could observe the vast extent of this interior sea, which is also called the Dead Sea, and into which flows an American Jordan. It is a picturesque expanse, framed in lofty crags in large strata, encrusted with white salt—a superb sheet of water, which was formerly of larger extent than now, its shores having encroached with the lapse of time, and thus at once reduced its breadth and increased its depth.

The Salt Lake, seventy miles long and thirty-five wide, is situated three miles eight hundred feet above the sea. Quite different from Lake Asphaltite, whose depression is twelve hundred feet below the sea, it contains considerable salt, and one quarter of the weight of its water is solid matter, its specific weight being 1,170, and, after being distilled, 1,000. Fishes are, of course, unable to live in it, and those which descend through the Jordan, the Weber, and other streams soon perish.

The country around the lake was well cultivated, for the Mormons are mostly farmers ; while ranches and pens for domesticated animals, fields of wheat, corn, and other cereals, luxuriant prairies, hedges of wild rose, clumps of acacias and milk-wort, would have been seen six months later. Now the ground was covered with a thin powdering of snow.

The train reached Ogden at two o'clock, where it rested for six hours, Mr. Fogg and his party had time to pay a visit to Salt Lake City, connected with Ogden by a branch road ; and they spent two hours in this strikingly American town, built on the pattern of other cities of the Union, like a checker-board, “with the sombre sadness of right-angles,” as Victor Hugo expresses it. The founder of the City of the Saints could not escape from the taste for symmetry which distinguishes the Anglo-Saxons. In this strange

country, where the people are certainly not up to the level of their institutions, everything is done "squarely"—cities, houses, and follies.

The travellers, then, were promenading, at three o'clock, about the streets of the town built between the banks of the Jordan and the spurs of the Wahsatch Range. They saw few or no churches, but the prophet's mansion, the court-house, and the arsenal, blue-brick houses with verandas and porches, surrounded by gardens bordered with acacias, palms, and locusts. A clay and pebble wall, built in 1853, surrounded the town ; and in the principal street were the market and several hotels adorned with pavilions. The place did not seem thickly populated. The streets were almost deserted, except in the vicinity of the temple, which they only reached after having traversed several quarters surrounded by palisades. There were many women, which was easily accounted for by the "peculiar institution" of the Mormons ; but it must not be supposed that all the Mormons are polygamists. They are free to marry or not, as they please ; but it is worth noting that it is mainly the female citizens of Utah who are anxious to marry, as, according to the Mormon religion, maiden ladies are not admitted to the possession of its highest joys. These poor creatures seemed to be neither well off nor happy. Some—the more well-to-do, no doubt—wore short, open black silk dresses, under a hood or modest shawl ; others were habited in Indian fashion.

Passepartout could not behold without a certain fright these women, charged, in groups, with conferring happiness on a single Mormon. His common sense pitied, above all, the husband. It seemed to him a terrible thing to have to guide so many wives at once across the vicissitudes of life, and to conduct them, as it were, in a body to the Mormon paradise, with the prospect of seeing them in the company of the glorious Smith, who doubtless was the chief ornament of that delightful place, to all eternity. He felt decidedly repelled from such a vocation, and he

imagined—perhaps he was mistaken—that the fair ones of Salt Lake City cast rather alarming glances on his person. Happily, his stay there was but brief. At four the party found themselves again at the station, took their places in the train, and the whistle sounded for starting. Just at the moment, however, that the locomotive wheels began to move, cries of “Stop ! stop !” were heard.

Trains, like time and tide, stop for no one. The gentleman who uttered the cries was evidently a belated Mormon. He was breathless with running. Happily for him, the station had neither gates nor barriers. He rushed along the track, jumped on the rear platform of the train, and fell, exhausted, into one of the seats.

Passepartout, who had been anxiously watching this amateur gymnast, approached him with lively interest, and learned that he had taken flight after an unpleasant domestic scene.

When the Mormon had recovered his breath, Passepartout ventured to ask him politely how many wives he had ; for, from the manner in which he had decamped, it might be thought that he had twenty at least.

“One, sir,” replied the Mormon, raising his arms heavenward—“one, and that was enough !”

CHAPTER XXVIII

IN WHICH PASSEPARTOUT DOES NOT SUCCEED IN
MAKING ANYBODY LISTEN TO REASON

The train, on leaving Great Salt Lake at Ogden, passed northward for an hour as far as Weber River, having completed nearly nine hundred miles from San Francisco. From this point it took an easterly direction towards the jagged Wahsatch Mountains. It was in the section included between this range and the Rocky Mountains that the American engineers found the most formidable difficulties

in laying the road, and that the government granted a subsidy of forty-eight thousand dollars per mile, instead of sixteen thousand allowed for the work done on the plains. But the engineers, instead of violating nature, avoided its difficulties by winding around, instead of penetrating the rocks. One tunnel only, fourteen thousand feet in length, was pierced in order to arrive at the great basin.

The track up to this time had reached its highest elevation at the Great Salt Lake. From this point it described a long curve, descending towards Bitter Creek Valley, to rise again to the dividing ridge of the waters between the Atlantic and the Pacific. There were many creeks in this mountainous region, and it was necessary to cross Muddy Creek, Green Creek, and others, upon culverts.

Passepartout grew more and more impatient as they went on, while Fix longed to get out of this difficult region, and was more anxious than Phileas Fogg himself to be beyond the danger of delays and accidents, and set foot on English soil.

At ten o'clock at night the train stopped at Fort Bridger station, and twenty minutes later entered Wyoming Territory, following the valley of Bitter Creek throughout. The next day, 7th December, they stopped for a quarter of an hour at Green River station. Snow had fallen abundantly during the night, but, being mixed with rain, it had half melted, and did not interrupt their progress. The bad weather, however, annoyed Passepartout ; for the accumulation of snow, by blocking the wheels of the cars, would certainly have been fatal to Mr. Fogg's tour.

"What an idea!" he said to himself. "Why did my master make this journey in winter? Couldn't he have waited for the good season to increase his chances?"

While the worthy Frenchman was absorbed in the state of the sky and the depression of the temperature, Aouda was experiencing fears from a totally different cause.

Several passengers had got off at Green River, and were walking up and down the platforms ; and among these

Aouda recognised Colonel Stamp Proctor, the same who had so grossly insulted Phileas Fogg at the San Francisco meeting. Not wishing to be recognised, the young woman drew back from the window, feeling much alarm at her discovery. She was attached to the man who, however coldly, gave her daily evidences of the most absolute devotion. She did not comprehend, perhaps, the depth of the sentiment with which her protector inspired her, which she called gratitude, but which, though she was unconscious of it, was really more than that. Her heart sank within her when she recognised the man whom Mr. Fogg desired, sooner or later, to call to account for his conduct. Chance alone, it was clear, had brought Colonel Proctor on this train ; but there he was, and it was necessary, at all hazards, that Phileas Fogg should not perceive his adversary.

Aouda seized a moment when Mr. Fogg was asleep to tell Fix and Passepartout whom she had seen.

“That Proctor on this train !” cried Fix. “Well, reassure yourself, madam ; before he settles with Mr. Fogg, he has got to deal with me ! It seems to me that I was the more insulted of the two.”

“And, besides,” added Passepartout, “I’ll take charge of him, colonel as he is.”

“Mr. Fix,” resumed Aouda, “Mr. Fogg will allow no one to avenge him. He said that he would come back to America to find this man. Should he perceive Colonel Proctor, we could not prevent a collision which might have terrible results. He must not see him.”

“You are right, madam,” replied Fix ; “a meeting between them might ruin all. Whether he were victorious or beaten, Mr. Fogg would be delayed, and——”

“And,” added Passepartout, “that would play the game of the gentlemen of the Reform Club. In four days we shall be in New York. Well, if my master does not leave this car during those four days, we may hope that chance will not bring him face to face with this confounded American. We must, if possible, prevent his stirring out of it.”

The conversation dropped. Mr. Fogg had just woke up, and was looking out of the window. Soon after Passepartout, without being heard by his master or Aouda, whispered to the detective, "Would you really fight for him?"

"I would do anything," replied Fix, in a tone which betrayed determined will, "to get him back living to Europe!"

Passepartout felt something like a shudder shoot through his frame, but his confidence in his master remained unbroken.

Was there any means of detaining Mr. Fogg in the car, to avoid a meeting between him and the colonel? It ought not to be a difficult task, since that gentleman was naturally sedentary and little curious. The detective, at least, seemed to have found a way; for, after a few moments, he said to Mr. Fogg, "These are long and slow hours, sir, that we are passing on the railway."

"Yes," replied Mr. Fogg; "but they pass."

"You were in the habit of playing whist," resumed Fix, "on the steamers."

"Yes; but it would be difficult to do so here. I have neither cards nor partners."

"Oh, but we can easily buy some cards, for they are sold on all the American trains. And as for partners, if madam plays——"

"Certainly, sir," Aouda quickly replied; "I understand whist. It is part of an English education."

"I myself have some pretensions to playing a good game. Well, here are three of us, and a dummy——"

"As you please, sir," replied Phileas Fogg, heartily glad to resume his favourite pastime—even on the railway.

Passepartout was despatched in search of the steward, and soon returned with two packs of cards, some pins, counters, and a shelf covered with cloth.

The game commenced. Aouda understood whist sufficiently well, and even received some compliments on her playing from Mr. Fogg. As for the detective, he was simply

an adept, and worthy of being matched against his present opponent.

"Now," thought Passepartout, "we've got him. He won't budge."

At eleven in the morning the train had reached the dividing ridge of the waters at Bridger Pass, seven thousand five hundred and twenty-four feet above the level of the sea, one of the highest points attained by the track in crossing the Rocky Mountains. After going about two hundred miles, the travellers at last found themselves on one of those vast plains which extend to the Atlantic, and which nature has made so propitious for laying the iron road.

On the declivity of the Atlantic basin the first streams, branches of the North Platte River, already appeared. The whole northern and eastern horizon was bounded by the immense semi-circular curtain which is formed by the southern portion of the Rocky Mountains, the highest being Laramie Peak. Between this and the railway extended vast plains, plentifully irrigated. On the right rose the lower spurs of the mountainous mass which extends southward to the sources of the Arkansas River, one of the great tributaries of the Missouri.

At half-past twelve the travellers caught sight for an instant of Fort Halleck, which commands that section ; and in a few more hours the Rocky Mountains were crossed. There was reason to hope, then, that no accident would mark the journey through this difficult country. The snow had ceased falling, and the air became crisp and cold. Large birds, frightened by the locomotive, rose and flew off in the distance. No wild beast appeared on the plain. It was a desert in its vast nakedness.

After a comfortable breakfast, served in the car, Mr. Fogg and his partners had just resumed whist, when a violent whistling was heard, and the train stopped. Passepartout put his head out of the door, but saw nothing to cause the delay ; no station was in view.

Aouda and Fix feared that Mr. Fogg might take it into

his head to get out ; but that gentleman contented himself with saying to his servant, " See what is the matter."

Passepartout rushed out of the car. Thirty or forty passengers had already descended, amongst them Colonel Stamp Proctor.

The train had stopped before a red signal which blocked the way. The engineer and conductor were talking excitedly with a signal-man, whom the station-master at Medicine Bow, the next stopping place, had sent on before. The passengers drew around and took part in the discussion, in which Colonel Proctor, with his insolent manner, was conspicuous.

Passepartout, joining the group, heard the signal-man say, " No ! you can't pass. The bridge at Medicine Bow is shaky, and would not bear the weight of the train."

This was a suspension-bridge thrown over some rapids, about a mile from the place where they now were. According to the signal-man, it was in a ruinous condition, several of the iron wires being broken ; and it was impossible to risk the passage. He did not in any way exaggerate the condition of the bridge. It may be taken for granted that, rash as the Americans usually are, when they are prudent there is good reason for it.

Passepartout, not daring to apprise his master of what he heard, listened with set teeth, immovable as a statue.

" Hum ! " cried Colonel Proctor ; " but we are not going to stay here, I imagine, and take root in the snow ? "

" Colonel," replied the conductor, " we have telegraphed to Omaha for a train, but it is not likely that it will reach Medicine Bow in less than six hours."

" Six hours ! " cried Passepartout.

" Certainly," returned the conductor, " Besides, it will take us as long as that to reach Medicine Bow on foot."

" But it is only a mile from here," said one of the passengers.

" Yes, but it's on the other side of the river."

" And can't we cross that in a boat ? " asked the colonel.

" That's impossible. The creek is swelled by the rains. It

is a rapid, and we shall have to make a circuit of ten miles to the north to find a ford."

The colonel launched a volley of oaths, denouncing the railway company and the conductor ; and Passepartout, who was furious, was not disinclined to make common cause with him. Here was an obstacle, indeed, which all his master's banknotes could not remove.

There was a general disappointment among the passengers, who, without reckoning the delay, saw themselves compelled to trudge fifteen miles over a plain covered with snow. They grumbled and protested, and would certainly have thus attracted Phileas Fogg's attention if he had not been completely absorbed in his game.

Passepartout found that he could not avoid telling his master what had occurred, and, with hanging head, he was turning towards the car, when the engineer—a true Yankee, named Forster—called out, " Gentlemen, perhaps there is a way, after all, to get over."

" On the bridge ? " asked a passenger.

" On the bridge."

" With our train ? "

" With our train."

Passepartout stopped short, and eagerly listened to the engineer.

" But the bridge is unsafe," urged the conductor.

" No matter," replied Forster ; " I think that by putting on the very highest speed we might have a chance of getting over."

" The devil ! " muttered Passepartout.

But a number of the passengers were at once attracted by the engineer's proposal, and Colonel Proctor was especially delighted, and found the plan a very feasible one. He told stories about engineers leaping their trains over rivers without bridges, by putting on full steam ; and many of those present avowed themselves of the engineer's mind.

" We have fifty chances out of a hundred of getting over," said one.

“ Eighty ! ninety ! ”

Passepartout was astounded, and, though ready to attempt anything to get over Medicine Creek, thought the experiment proposed a little too American. “ Besides,” thought he, “ there’s a still more simple way, and it does not even occur to any of these people ! Sir,” said he aloud to one of the passengers, “ the engineer’s plan seems to me a little dangerous, but——”

“ Eighty chances ! ” replied the passenger, turning his back on him.

“ I know it,” said Passepartout, turning to another passenger, “ but a simple idea——”

“ Ideas are no use,” returned the American, shrugging his shoulders, “ as the engineer assures us that we can pass.”

“ Doubtless,” urged Passepartout, “ we can pass, but perhaps it would be more prudent——”

“ What ! Prudent ! ” cried Colonel Proctor, whom this word seemed to excite prodigiously. “ At full speed, don’t you see, at full speed ! ”

“ I know—I see,” repeated Passepartout ; “ but it would be, if not more prudent, since that word displeases you, at least more natural——”

“ Who ! What ! What’s the matter with this fellow ? ” cried several.

The poor fellow did not know to whom to address himself.

“ Are you afraid ? ” asked Colonel Proctor.

“ I afraid ! Very well ; I will show these people that a Frenchman can be as American as they ! ”

“ All aboard ! ” cried the conductor.

“ Yes, all aboard ! ” repeated Passepartout, and immediately. “ But they can’t prevent me from thinking that it would be more natural for us to cross the bridge on foot, and let the train come after ! ”

But no one heard this sage reflection, nor would anyone have acknowledged its justice. The passengers resumed their places in the cars. Passepartout took his seat without telling

what had passed. The whist-players were quite absorbed in their game.

The locomotive whistled vigorously ; the engineer, reversing the steam, backed the train for nearly a mile—retiring, like a jumper, in order to take a longer leap. Then, with another whistle, he began to move forward ; the train increased its speed, and soon its rapidity became frightful ; a prolonged screech issued from the locomotive ; the piston worked up and down twenty strokes to the second. They perceived that the whole train, rushing on at the rate of a hundred miles an hour, hardly bore upon the rails at all.

And they passed over ! It was like a flash. No one saw the bridge. The train leaped, so to speak, from one bank to the other, and the engineer could not stop it until it had gone five miles beyond the station. But scarcely had the train passed the river, when the bridge, completely ruined, fell with a crash into the rapids of Medicine Bow.

CHAPTER XXIX

IN WHICH CERTAIN INCIDENTS ARE NARRATED
WHICH ARE ONLY TO BE MET WITH ON AMERICAN
RAILROADS

The train pursued its course, that evening, without interruption, passing Fort Saunders, crossing Cheyne Pass, and reaching Evans Pass. The road here attained the highest elevation of the journey, eight thousand and ninety-one feet above the level of the sea. The travellers had now only to descend to the Atlantic by limitless plains, levelled by nature. A branch of the “ grand trunk ” led off southward to Denver, the capital of Colorado. The country round about is rich in gold and silver, and more than fifty thousand inhabitants are already settled there.

Thirteen hundred and eighty-two miles had been passed over from San Francisco, in three days and three nights ;

four days and nights more would probably bring them to New York. Phileas Fogg was not as yet behind-hand.

During the night Camp Walbach was passed on the left ; Lodge Pole Creek ran parallel with the road, marking the boundary between the territories of Wyoming and Colorado. They entered Nebraska at eleven, passed near Sedgwick, and touched at Julesburg, on the southern branch of the Platte River.

It was here that the Union Pacific Railroad was inaugurated on the 23rd of October, 1867, by the chief engineer, General Dodge. Two powerful locomotives, carrying nine cars of invited guests, amongst whom was Thomas C. Durant, vice-president of the road, stopped at this point ; cheers were given, the Sioux and Pawnees performed an imitation Indian battle, fireworks were let off, and the first number of the *Railway Pioneer* was printed by a press brought on the train. Thus was celebrated the inauguration of this great railroad, a mighty instrument of progress and civilisation, thrown across the desert, and destined to link together cities and towns which do not yet exist. The whistle of the locomotive, more powerful than Amphion's lyre, was about to bid them rise from American soil.

Fort McPherson was left behind at eight in the morning, and three hundred and fifty-seven miles had yet to be traversed before reaching Omaha. The road followed the capricious windings of the southern branch of the Platte River, on its left bank. At nine the train stopped at the important town of North Platte, built between the two arms of the river, which rejoin each other around it and form a single artery—a large tributary whose waters empty into the Missouri a little above Omaha.

The one hundred and first meridian was passed.

Mr. Fogg and his partners had resumed their game ; no one—not even the dummy—complained of the length of the trip. Fix had begun by winning several guineas, which he seemed likely to lose ; but he showed himself a not less eager whist-player than Mr. Fogg. During the morning, chance

distinctly favoured that gentleman. Trumps and honours were showered upon his hands.

Once, having resolved on a bold stroke, he was on the point of playing a spade, when a voice behind him said, "I should play a diamond."

Mr. Fogg, Aouda, and Fix raised their heads, and beheld Colonel Proctor.

Stamp Proctor and Phileas Fogg recognised each other at once.

"Ah ! it's you, is it, Englishman ?" cried the colonel ;
"it's you who are going to play a spade !"

"And who plays it," replied Phileas Fogg coolly, throwing down the ten of spades.

"Well, it pleases me to have it diamonds," replied Colonel Proctor, in an insolent tone.

He made a movement as if to seize the card which had just been played, adding, "You don't understand anything about whist."

"Perhaps I do, as well as another," said Phileas Fogg, rising.

"You have only to try, son of John Bull," replied the colonel.

Aouda turned pale, and her blood ran cold. She seized Mr. Fogg's arm and gently pulled him back. Passepartout was ready to pounce upon the American, who was staring insolently at his opponent. But Fix got up, and, going to Colonel Proctor said, "You forget that it is I with whom you have to deal, sir ; for it was I whom you not only insulted, but struck !"

"Mr. Fix," said Mr. Fogg, "pardon me, but this affair is mine, and mine only. The colonel has again insulted me, by insisting that I should not play a spade, and he shall give me satisfaction for it."

"When and where you will," replied the American, "and with whatever weapon you choose."

Aouda in vain attempted to retain Mr. Fogg ; as vainly did the detective endeavour to make the quarrel his.

Passepartout wished to throw the colonel out of the window, but a sign from his master checked him. Phileas Fogg left the car, and the American followed him upon the platform.

"Sir," said Mr. Fogg to his adversary, "I am in a great hurry to get back to Europe, and any delay whatever will be greatly to my disadvantage."

"Well, what's that to me?" replied Colonel Proctor.

"Sir," said Mr. Fogg, very politely, "after our meeting at San Francisco, I determined to return to America and find you as soon as I had completed the business which called me to England."

"Really!"

"Will you appoint a meeting for six months hence?"

"Why not ten years hence?"

"I say six months," returned Phileas Fogg; "and I shall be at the place of meeting promptly."

"All this is an evasion," cried Stamp Proctor. "Now or never!"

"Very good. You are going to New York?"

"No."

"To Chicago?"

"No."

"To Omaha?"

"What difference is it to you? Do you know Plum Creek?"

"No," replied Mr. Fogg.

"It's the next station. The train will be there in an hour, and will stop there ten minutes. In ten minutes several revolver-shots could be exchanged."

"Very well," said Mr. Fogg. "I will stop at Plum Creek."

"And I guess you'll stay there too," added the American insolently.

"Who knows?" replied Mr. Fogg, returning to the car as coolly as usual. He began to reassure Aouda, telling her that blusterers were never to be feared, and begged Fix to be his second at the approaching duel, a request which the

detective could not refuse. Mr. Fogg resumed the interrupted game with perfect calmness.

At eleven o'clock the locomotive's whistle announced that they were approaching Plum Creek station. Mr. Fogg rose, and, followed by Fix, went out upon the platform. Passepartout accompanied him, carrying a pair of revolvers. Aouda remained in the car, as pale as death. *

The door of the next car opened, and Colonel Proctor appeared on the platform, attended by a Yankee of his own stamp as his second. But just as the combatants were about to step from the train, the conductor hurried up, and shouted, "You can't get off, gentlemen!"

"Why not?" asked the colonel.

"We are twenty minutes late, and we shall not stop."

"But I am going to fight a duel with this gentleman."

"I am sorry," said the conductor; "but we shall be off at once. There's the bell ringing now."

The train started.

"I'm really very sorry, gentlemen," said the conductor. "Under any other circumstances I should have been happy to oblige you. But, after all, as you have not had time to fight here, why not fight as we go along?"

"That wouldn't be convenient, perhaps, for this gentleman," said the colonel, in a jeering tone.

"It would be perfectly so," replied Phileas Fogg.

"Well, we are really in America," thought Passepartout, "and the conductor is a gentleman of the first order!"

So muttering, he followed his master.

The two combatants, their seconds, and the conductor passed through the cars to the rear of the train. The last car was only occupied by a dozen passengers, whom the conductor politely asked if they would not be so kind as to leave it vacant for a few moments, as two gentlemen had an affair of honour to settle. The passengers granted the request with alacrity, and straightway disappeared on the platform.

The car, which was some fifty feet long, was very convenient for their purpose. The adversaries might march

on each other in the aisle, and fire at their ease. Never was duel more easily arranged. Mr. Fogg and Colonel Proctor, each provided with two six-barrelled revolvers, entered the car. The seconds, remaining outside, shut them in. They were to begin firing at the first whistle of the locomotive. After an interval of two minutes, what remained of the two gentlemen would be taken from the car.

Nothing could be more simple. Indeed, it was all so simple that Fix and Passepartout felt their hearts beating as if they would crack. They were listening for the whistle agreed upon, when suddenly savage cries resounded in the air, accompanied by reports which certainly did not issue from the car where the duellists were. The reports continued in front and the whole length of the train. Cries of terror proceeded from the interior of the cars.

Colonel Proctor and Mr. Fogg, revolvers in hand, hastily quitted their prison, and rushed forward where the noise was most clamorous. They then perceived that the train was attacked by a band of Sioux.

This was not the first attempt of these daring Indians, for more than once they had waylaid trains on the road. A hundred of them had, according to their habit, jumped upon the steps without stopping the train, with the ease of a clown mounting a horse at full gallop.

The Sioux were armed with guns, from which came the reports, to which the passengers, who were almost all armed, responded by revolver-shots.

The Indians had first mounted the engine, and half stunned the engineer and stoker with blows from their muskets. A Sioux chief, wishing to stop the train, but not knowing how to work the regulator, had opened wide instead of closing the steam-valve, and the locomotive was plunging forward with terrific velocity.

The Sioux had at the same time invaded the cars, skipping like enraged monkeys over the roofs, thrusting open the doors, and fighting hand to hand with the passengers. Penetrating the baggage-car, they pillaged it, throwing the

trunks out of the train. The cries and shots were constant.

The travellers defended themselves bravely ; some of the cars were barricaded, and sustained a siege, like moving forts, carried along at a speed of a hundred miles an hour.

Aouda behaved courageously from the first. She defended herself like a true heroine with a revolver, which she shot through the broken windows whenever a savage made his appearance. Twenty Sioux had fallen mortally wounded to the ground, and the wheels crushed those who fell upon the rails as if they had been worms. Several passengers, shot or stunned, lay on the seats.

It was necessary to put an end to the struggle, which had lasted for ten minutes, and which would result in the triumph of the Sioux if the train was not stopped. Fort Kearney station, where there was a garrison, was only two miles distant ; but, that once passed, the Sioux would be masters of the train between Fort Kearney and the station beyond.

The conductor was fighting beside Mr. Fogg, when he was shot and fell. At the same moment he cried, " Unless the train is stopped in five minutes, we are lost ! "

" It shall be stopped," said Philcas Fogg, preparing to rush from the car.

" Stay, monsieur," cried Passepartout ; " I will go."

Mr. Fogg had not time to stop the brave fellow, who, opening a door unperceived by the Indians, succeeded in slipping under the car ; and while the struggle continued, and the balls whizzed across each other over his head, he made use of his old acrobatic experience, and with amazing agility worked his way under the cars, holding on to the chains, aiding himself by the brakes and edges of the sashes, creeping from one car to another with marvellous skill, and thus gaining the forward end of the train.

There, suspended by one hand between the baggage-car and the tender, with the other he loosened the safety chains ; but, owing to the traction, he would never have succeeded in unscrewing the yoking-bar, had not a violent concussion jolted this bar out. The train, now detached

from the engine, remained a little behind, whilst the locomotive rushed forward with increased speed.

Carried on by the force already acquired, the train still moved for several minutes ; but the brakes were worked, and at last they stopped, less than a hundred feet from Kearney station.

The soldiers of the fort, attracted by the shots, hurried up ; the Sioux had not expected them, and decamped in a body before the train entirely stopped.

But when the passengers counted each other on the station platform several were found missing ; among others the courageous Frenchman, whose devotion had just saved them.

CHAPTER XXX

IN WHICH PHILEAS FOGG SIMPLY DOES HIS DUTY

Three passengers—including Passepartout—had disappeared. Had they been killed in the struggle ? Were they taken prisoners by the Sioux ? It was impossible to tell.

There were many wounded, but none mortally. Colonel Proctor was one of the most seriously hurt ; he had fought bravely, and a ball had entered his groin. He was carried into the station with the other wounded passengers, to receive such attention as could be of avail.

Aouda was safe ; and Phileas Fogg, who had been in the thickest of the fight, had not received a scratch. Fix was slightly wounded in the arm. But Passepartout was not to be found, and tears coursed down Aouda's cheeks.

All the passengers had got out of the train, the wheels of which were stained with blood. From the tyres and spokes hung ragged pieces of flesh. As far as the eye could reach on the white plain behind, red trails were visible. The last Sioux were disappearing in the south, along the banks of Republican River.

Mr. Fogg, with folded arms, remained motionless. He

had a serious decision to make. Aouda, standing near him, looked at him without speaking, and he understood her look. If his servant was a prisoner, ought he not to risk everything to rescue him from the Indians? "I will find him, living or dead," said he quietly to Aouda.

"Ah, Mr.—Mr. Fogg!" cried she, clasping his hands and covering them with tears.

"Living," added Mr. Fogg, "if we do not lose a moment."

Phileas Fogg, by this resolution, inevitably sacrificed himself; he pronounced his own doom. The delay of a single day would make him lose the steamer at New York, and his bet would be certainly lost. But as he thought, "It is my duty," he did not hesitate.

The commanding officer of Fort Kearney was there. A hundred of his soldiers had placed themselves in a position to defend the station, should the Sioux attack it.

"Sir," said Mr. Fogg to the captain, "three passengers have disappeared."

"Dead?" asked the captain.

"Dead or prisoners; that is the uncertainty which must be solved. Do you propose to pursue the Sioux?"

"That's a serious thing to do, sir," returned the captain. "These Indians may retreat beyond the Arkansas, and I cannot leave the fort unprotected."

"The lives of three men are in question, sir," said Phileas Fogg.

"Doubtless; but can I risk the lives of fifty men to save three?"

"I don't know whether you can, sir; but you ought to do so."

"Nobody here," returned the other, "has a right to teach me my duty."

"Very well," said Mr. Fogg, coldly. "I will go alone."

"You, sir!" cried Fix, coming up; "you go alone in pursuit of the Indians?"

"Would you have me leave this poor fellow to perish—him to whom every one present owes his life? I shall go."

"No, sir, you shall not go alone," cried the captain, touched in spite of himself. "No ! you are a brave man. Thirty volunteers !" he added, turning to the soldiers.

The whole company started forward at once. The captain had only to pick his men. Thirty were chosen, and an old sergeant placed at their head.

"Thanks, captain," said Mr. Fogg.

"Will you let me go with you ?" asked Fix.

"Do as you please, sir. But if you wish to do me a favour, you will remain with Aouda. In case anything should happen to me——"

A sudden pallor overspread the detective's face. Separate himself from the man whom he had so persistently followed step by step ! Leave him to wander about in this desert ! Fix gazed attentively at Mr. Fogg, and, despite his suspicions and of the struggle which was going on within him, he lowered his eyes before that calm and frank look.

"I will stay," said he.

A few moments after, Mr. Fogg pressed the young woman's hand, and, having confided to her his precious carpet-bag, went off with the sergeant and his little squad. But, before going, he had said to the soldiers, "My friends, I will divide five thousand dollars among you, if we save the prisoners."

It was then a little past noon.

Aouda retired to a waiting-room, and there she waited alone, thinking of the simple and noble generosity, the tranquil courage of Phileas Fogg. He had sacrificed his fortune, and was now risking his life, all without hesitation, from duty, in silence.

Fix did not have the same thoughts, and could scarcely conceal his agitation. He walked feverishly up and down the platform, but soon resumed his outward composure. He now saw the folly of which he had been guilty in letting Fogg go alone. What ! This man, whom he had just followed around the world, was permitted now to separate himself from him ! He began to accuse and abuse himself,

and, as if he were director of police, administered to himself a sound lecture for his greenness.

"I have been an idiot!" he thought, "and this man will see it. He has gone, and won't come back! But how is it that I, Fix, who have in my pocket a warrant for his arrest, have been so fascinated by him? Decidedly, I am nothing but an ass!"

So reasoned the detective, while the hours crept by all too slowly. He did not know what to do. Sometimes he was tempted to tell Aouda all; but he could not doubt how the young woman would receive his confidences. What course should he take? He thought of pursuing Fogg across the vast white plains; it did not seem impossible that he might overtake him. Footsteps were easily printed on the snow! But soon, under a new sheet, every imprint would be effaced.

Fix became discouraged. He felt a sort of insurmountable longing to abandon the game altogether. He could now leave Fort Kearney station, and pursue his journey homeward in peace.

Towards two o'clock in the afternoon, while it was snowing hard, long whistles were heard approaching from the east. A great shadow, preceded by a wild light, slowly advanced, appearing still larger through the mist, which gave it a fantastic aspect. No train was expected from the east, neither had there been time for the succour asked for by telegraph to arrive; the train from Omaha to San Francisco was not due till the next day. The mystery was soon explained.

The locomotive, which was slowly approaching with deafening whistles, was that which, having been detached from the train, had continued its route with such terrific rapidity, carrying off the unconscious engineer and stoker. It had run several miles, when, the fire becoming low for want of fuel, the steam had slackened; and it had finally stopped an hour after, some twenty miles beyond Fort Kearney. Neither the engineer nor the stoker was dead,

and, after remaining for some time in their swoon, had come to themselves. The train had then stopped. The engineer, when he found himself in the desert, and the locomotive without cars, understood what had happened. He could not imagine how the locomotive had become separated from the train ; but he did not doubt that the train left behind was in distress.

He did not hesitate what to do. It would be prudent to continue on to Omaha, for it would be dangerous to return to the train, which the Indians might still be engaged in pillaging. Nevertheless, he began to rebuild the fire in the furnace ; the pressure again mounted, and the locomotive returned, running backwards to Fort Kearney. This it was which was whistling in the mist.

The travellers were glad to see the locomotive resume its place at the head of the train. They could now continue the journey so terribly interrupted.

Aouda, on seeing the locomotive come up, hurried out of the station, and asked the conductor, "Are you going to start ?"

"At once, madam."

"But the prisoners, our unfortunate fellow-travellers——"

"I cannot interrupt the trip," replied the conductor. "We are already three hours behind time."

"And when will another train pass here from San Francisco ?"

"To-morrow evening, madam."

"To-morrow evening ! But then it will be too late ! We must wait——"

"It is impossible," responded the conductor. "If you wish to go, please get in."

"I will not go," said Aouda.

Fix had heard this conversation. A little while before, when there was no prospect of proceeding on the journey, he had made up his mind to leave Fort Kearney ; but now that the train was there, ready to start, and he had only to take his seat in the car, an irresistible influence held him

back. The station platform burned his feet, and he could not stir. The conflict in his mind again began ; anger and failure stifled him. He wished to struggle on to the end.

Meanwhile the passengers and some of the wounded, among them Colonel Proctor, whose injuries were serious, had taken their places in the train. The buzzing of the overheated boiler was heard, and the steam was escaping from the valves. The engineer whistled, the train started, and soon disappeared, mingling its white smoke with the eddies of the densely falling snow.

The detective had remained behind.

Several hours passed. The weather was dismal, and it was very cold. Fix sat motionless on a bench in the station ; he might have been thought asleep. Aouda, despite the storm, kept coming out of the waiting-room, going to the end of the platform, and peering through the tempest of snow, as if to pierce the mist which narrowed the horizon around her, and to hear, if possible, some welcome sound. She heard and saw nothing. Then she would return, chilled through, to issue out again after the lapse of a few moments, but always in vain.

Evening came, and the little band had not returned. Where could they be ? Had they found the Indians, and were they having a conflict with them, or were they still wandering amid the mist ? The commander of the fort was anxious, though he tried to conceal his apprehensions. As night approached, the snow fell less plentifully, but it became intensely cold. Absolute silence rested on the plains. Neither flight of bird nor passing of beast troubled the perfect calm.

Throughout the night Aouda, full of sad forebodings, her heart stifled with anguish, wandered about on the verge of the plains. Her imagination carried her far off, and showed her innumerable dangers. What she suffered through the long hours it would be impossible to describe.

Fix remained stationary in the same place, but did not

sleep. Once a man approached and spoke to him, and the detective merely replied by shaking his head.

Thus the night passed. At dawn, the half-extinguished disc of the sun rose above a misty horizon ; but it was now possible to recognise objects two miles off. Phileas Fogg and the squad had gone southward ; in the south all was still vacancy. It was then seven o'clock.

The captain, who was really alarmed, did not know what course to take.

Should he send another detachment to the rescue of the first ? Should he sacrifice more men, with so few chances of saving those already sacrificed ? His hesitation did not last long, however. Calling one of his lieutenants, he was on the point of ordering a reconnaissance, when gunshots were heard. Was it a signal ? The soldiers rushed out of the fort, and half a mile off they perceived a little band returning in good order.

Mr. Fogg was marching at their head, and just behind him were Passepartout and the other two travellers, rescued from the Sioux.

They had met and fought the Indians ten miles south of Fort Kearney. Shortly before the detachment arrived, Passepartout and his companions had begun to struggle with their captors, three of whom the Frenchman had felled with his fists, when his master and the soldiers hastened up to their relief.

All were welcomed with joyful cries. Phileas Fogg distributed the reward he had promised to the soldiers, while Passepartout, not without reason, muttered to himself, "It must certainly be confessed that I cost my master dear !"

Fix, without saying a word, looked at Mr. Fogg, and it would have been difficult to analyse the thoughts which struggled within him. As for Aouda, she took her protector's hand and pressed it in her own, too much moved to speak.

Meanwhile, Passepartout was looking about for the train ; he thought he should find it there, ready to start

for Omaha, and he hoped that the time lost might be regained.

"The train ! the train !" cried he.

"Gone," replied Fix.

"And when does the next train pass here ?" said Phileas Fogg.

"Not till this evening."

"Ah !" returned the impassible gentleman quietly.

CHAPTER XXXI

IN WHICH FIX THE DETECTIVE CONSIDERABLY
FURTHERS THE INTERESTS OF PHILEAS FOGG

Phileas Fogg found himself twenty hours behind time. Passepartout, the involuntary cause of this delay, was desperate. He had ruined his master !

At this moment the detective approached Mr. Fogg, and, looking him intently in the face, said :

"Seriously, sir, are you in great haste ?"

"Quite seriously."

"I have a purpose in asking," resumed Fix. "Is it absolutely necessary that you should be in New York on the 11th, before nine o'clock in the evening, the time that the steamer leaves for Liverpool ?"

"It is absolutely necessary."

"And, if your journey had not been interrupted by these Indians, you would have reached New York on the morning of the 11th ?"

"Yes ; with eleven hours to spare before the steamer left."

"Good ! you are therefore twenty hours behind. Twelve from twenty leaves eight. You must regain eight hours. Do you wish to try to do so ?"

"On foot ?" asked Mr. Fogg.

"No ; on a sledge," replied Fix. "On a sledge with sails. A man has proposed such a method to me."

It was the man who had spoken to Fix during the night, and whose offer he had refused.

Phileas Fogg did not reply at once ; but Fix, having pointed out the man, who was walking up and down in front of the station, Mr. Fogg went up to him. An instant after, Mr. Fogg and the American, whose name was Mudge, entered a hut built just below the fort.

There Mr. Fogg examined a curious vehicle, a kind of frame on two long beams, a little raised in front like the runners of a sledge, and upon which there was room for five or six persons. A high mast was fixed on the frame, held firmly by metallic lashings, to which was attached a large brigantine sail. This mast held an iron stay upon which to hoist a jib-sail. Behind, a sort of rudder served to guide the vehicle. It was, in short, a sledge rigged like a sloop. During the winter, when the trains are blocked up by the snow, these sledges make extremely rapid journeys across the frozen plains from one station to another. Provided with more sails than a cutter, and with the wind behind them, they slip over the surface of the prairies with a speed equal if not superior to that of the express trains.

Mr. Fogg readily made a bargain with the owner of this land-craft. The wind was favourable, being fresh, and blowing from the west. The snow had hardened, and Mudge was very confident of being able to transport Mr. Fogg in a few hours to Omaha. Thence the trains eastward run frequently to Chicago and New York. It was not impossible that the lost time might yet be recovered ; and such an opportunity was not to be rejected.

Not wishing to expose Aouda to the discomforts of travelling in the open air, Mr. Fogg proposed to leave her with Passepartout at Fort Kearney, the servant taking upon himself to escort her to Europe by a better route and under more favourable conditions. But Aouda refused to separate from Mr. Fogg, and Passepartout was delighted with her decision ; for nothing could induce him to leave his master while Fix was with him.

It would be difficult to guess the detective's thoughts. Was this conviction shaken by Phileas Fogg's return, or did he still regard him as an exceedingly shrewd rascal, who, his journey round the world completed, would think himself absolutely safe in England? Perhaps Fix's opinion of Phileas Fogg was somewhat modified; but he was nevertheless resolved to do his duty, and to hasten the return of the whole party to England as much as possible.

At eight o'clock the sledge was ready to start. The passengers took their places on it, and wrapped themselves up closely in their travelling-cloaks. The two great sails were hoisted, and under the pressure of the wind the sledge slid over the hardened snow with a velocity of forty miles an hour.

The distance between Fort Kearney and Omaha, as the birds fly, is at most two hundred miles. If the wind held good, the distance might be traversed in five hours; if no accident happened the sledge might reach Omaha by one o'clock.

What a journey! The travellers, huddled close together, could not speak for the cold, intensified by the rapidity at which they were going. The sledge sped on as lightly as a boat over the waves. When the breeze came skimming the earth the sledge seemed to be lifted off the ground by its sails. Mudge, who was at the rudder, kept in a straight line, and by a turn of his hand checked the lurches which the vehicle had a tendency to make. All the sails were up, and the jib was so arranged as not to screen the brigantine. A top-mast was hoisted, and another jib, held out to the wind, added its force to the other sails. Although the speed could not be exactly estimated, the sledge could not be going at less than forty miles an hour.

"If nothing breaks," said Mudge, "we shall get there!"

Mr. Fogg had made it for Mudge's interest to reach Omaha within the time agreed on, by the offer of a handsome reward.

The prairie, across which the sledge was moving in a straight line, was as flat as a sea. It seemed like a vast

frozen lake. The railroad which ran through this section ascended from the south-west to the north-west by Great Island, Columbus, an important Nebraska town, Schuyler, and Fremont, to Omaha. It followed throughout the right bank of the Platte River. The sledge, shortening this route, took a chord of the arc described by the railway. Mudge was not afraid of being stopped by the Platte River, because it was frozen. The road, then, was quite clear of obstacles, and Phileas Fogg had but two things to fear—an accident to the sledge, and a change or calm in the wind.

But the breeze, far from lessening its force, blew as if to bend the mast, which, however, the metallic lashings held firmly. These lashings, like the chords of a stringed instrument, resounded as if vibrated by a violin bow. The sledge slid along in the midst of a plaintively intense melody.

“Those chords give the fifth and the octave,” said Mr. Fogg.

These were the only words he uttered during the journey. Aouda, cosily packed in furs and cloaks, was sheltered as much as possible from the attacks of the freezing wind. As for Passepartout, his face was as red as the sun’s disc when it sets in the mist, and he laboriously inhaled the biting air. With his natural buoyancy of spirits, he began to hope again. They would reach New York on the evening, if not on the morning, of the 11th, and there was still some chances that it would be before the steamer sailed for Liverpool.

Passepartout even felt a strong desire to grasp his ally, Fix, by the hand. He remembered that it was the detective who procured the sledge, the only means of reaching Omaha in time ; but, checked by some presentiment, he kept his usual reserve. One thing, however, Passepartout would never forget, and that was the sacrifice which Mr. Fogg had made, without hesitation, to rescue him from the Sioux. Mr. Fogg had risked his fortune and his life. No ! His servant would never forget that !

While each of the party was absorbed in reflections so different, the sledge flew past over the vast carpet of snow.

The creeks it passed over were not perceived. Fields and streams disappeared under the uniform whiteness. The plain was absolutely deserted. Between the Union Pacific road and the branch which unites Kearney with Saint Joseph it formed a great uninhabited island. Neither village, station, nor fort appeared. From time to time they sped by some phantom-like tree, whose white skeleton twisted and rattled in the wind. Sometimes flocks of wild birds rose, or bands of gaunt, famished, ferocious prairie-wolves ran howling after the sledge. Passepartout, revolver in hand, held himself ready to fire on those which came too near. Had an accident then happened to the sledge, the travellers, attacked by these beasts, would have been in the most terrible danger ; but it held on its even course, soon gained on the wolves, and ere long left the howling band at a safe distance behind.

About noon Mudge perceived by certain landmarks that he was crossing the Platte River. He said nothing, but he felt certain that he was now within twenty miles of Omaha. In less than an hour he left the rudder and furled his sails, whilst the sledge, carried forward by the great impetus the wind had given it, went on half a mile further with its sails unspread.

It stopped at last, and Mudge, pointing to a mass of roofs white with snow, said : " We have got there ! "

Arrived ! Arrived at the station which is in daily communication, by numerous trains, with the Atlantic seaboard !

Passepartout and Fix jumped off, stretched their stiffened limbs, and aided Mr. Fogg and the young woman to descend from the sledge. Phileas Fogg generously rewarded Mudge, whose hand Passepartout warmly grasped, and the party directed their steps to the Omaha railway station.

The Pacific Railroad proper finds its terminus at this important Nebraska town. Omaha is connected with Chicago by the Chicago and Rock Island Railroad, which runs directly east, and passes fifty stations.

A train was ready to start when Mr. Fogg and his party reached the station, and they only had time to get into the cars. They had seen nothing of Omaha ; but Passepartout confessed to himself that this was not to be regretted, as they were not travelling to see the sights.

The train passed rapidly across the State of Iowa, by Council Bluffs, Des Moines, and Iowa City. During the night it crossed the Mississippi at Davenport, and by Rock Island entered Illinois. The next day, which was the 10th, at four o'clock in the evening, it reached Chicago, already risen from its ruins, and more proudly seated than ever on the borders of its beautiful Lake Michigan.

Nine hundred miles separated Chicago from New York ; but trains are not wanting at Chicago. Mr. Fogg passed at once from one to the other, and the locomotive of the Pittsburg, Fort Wayne, and Chicago Railway left at full speed, as if it fully comprehended that that gentleman had no time to lose. It traversed Indiana, Ohio, Pennsylvania, and New Jersey like a flash, rushing through towns with antique names, some of which had streets and car-tracks, but as yet no houses. At last the Hudson came into view ; and, at a quarter-past eleven in the evening of the 11th, the train stopped in the station on the right bank of the river, before the very pier of the Cunard line.

The *China*, for Liverpool, had started three-quarters of an hour before !

CHAPTER XXXII

IN WHICH PHILEAS FOGG ENGAGES IN A DIRECT
STRUGGLE WITH BAD FORTUNE

The *China*, in leaving, seemed to have carried off Phileas Fogg's last hope. None of the other steamers were able to serve his projects. The *Pereire*, of the French Transatlantic Company, whose admirable steamers are equal to any in

speed and comfort, did not leave until the 14th ; the Hamburg boats did not go directly to Liverpool or London, but to Havre ; and the additional trip from Havre to Southampton would render Phileas Fogg's last efforts of no avail. The Inman steamer did not depart till the next day, and could not cross the Atlantic in time to save the wager.

Mr. Fogg learned all this in consulting his *Bradshaw*, which gave him the daily movements of the trans-Atlantic steamers.

Passepartout was crushed ; it overwhelmed him to lose the boat by three-quarters of an hour. It was his fault, for, instead of helping his master, he had not ceased putting obstacles in his path ! And when he recalled all the incidents of the tour, when he counted up the sums expended in pure loss and on his own account, when he thought that the immense stake, added to the heavy charges of this useless journey, would completely ruin Mr. Fogg, he overwhelmed himself with bitter self-accusations. Mr. Fogg, however, did not reproach him ; and, on leaving the Cunard pier, only said : " We will consult about what is best to-morrow. Come."

The party crossed the Hudson in the Jersey City ferry-boat, and drove in a carriage to the St. Nicholas Hotel, on Broadway. Rooms were engaged, and the night passed, briefly to Phileas Fogg, who slept profoundly, but very long to Aouda and the others, whose agitation did not permit them to rest.

The next day was the 12th of December. From seven in the morning of the 12th to a quarter before nine in the evening of the 21st there were nine days, thirteen hours, and forty-five minutes. If Phileas Fogg had left in the *China*, one of the fastest steamers on the Atlantic, he would have reached Liverpool, and then London, within the period agreed upon.

Mr. Fogg left the hotel alone, after giving Passepartout instructions to await his return, and inform Aouda to be

ready at an instant's notice. He proceeded to the banks of the Hudson, and looked about among the vessels moored or anchored in the river, for any that were about to depart. Several had departure signals, and were preparing to put to sea at morning tide ; for in this immense and admirable port there is not one day in a hundred that vessels do not set out for every quarter of the globe. But they were mostly sailing vessels, of which, of course, Phileas Fogg could make no use.

He seemed about to give up all hope, when he espied, anchored at the Battery, a cable's length off at most, a trading vessel, with a screw, well-shaped, whose funnel, puffing a cloud of smoke, indicated that she was getting ready for departure.

Phileas Fogg hailed a boat, got into it, and soon found himself on board the *Henrietta*, iron-hulled, wood-built above. He ascended to the deck, and asked for the captain, who forthwith presented himself. He was a man of fifty, a sort of sea-wolf, with big eyes, a complexion of oxidised copper, red hair and thick neck, and a growling voice.

"The captain?" asked Mr. Fogg.

"I am the captain."

"I am Phileas Fogg, of London."

"And I am Andrew Speedy, of Cardiff."

"You are going to put to sea?"

"In an hour."

"You are bound for——"

"Bordeaux."

"And your cargo?"

"No freight. Going in ballast."

"Have you any passengers?"

"No passengers. Never have passengers. Too much in the way."

"Is your vessel a swift one?"

"Between eleven and twelve knots. The *Henrietta*, well known."

"Will you carry me and three other persons to Liverpool?"

"To Liverpool? Why not to China?"

"I said Liverpool."

"No!"

"No?"

"No. I am setting out for Bordeaux, and shall go to Bordeaux."

"Money is no object?"

"None."

The captain spoke in a tone which did not admit of a reply.

"But the owners of the *Henrietta*——" resumed Phileas Fogg.

"The owners are myself," replied the captain. "The vessel belongs to me."

"I will freight it for you."

"No."

"I will buy it of you."

"No."

Phileas Fogg did not betray the least disappointment; but the situation was a grave one. It was not at New York as at Hong Kong, nor with the captain of the *Henrietta* as with the captain of the *Tankadere*. Up to this time money had smoothed away every obstacle. Now money failed.

Still, some means must be found to cross the Atlantic on a boat, unless by balloon—which would have been venture-some, besides not being capable of being put in practice. It seemed that Phileas Fogg had an idea, for he said to the captain, "Well, will you carry me to Bordeaux?"

"No, not if you paid me two hundred dollars."

"I offer you two thousand."

"A piece?"

"A piece."

"And there are four of you?"

"Four."

Captain Speedy began to scratch his head. There were

eight thousand dollars to gain, without changing his route ; for which it was well worth conquering the repugnance he had for all kinds of passengers. Besides, passengers at two thousand dollars are no longer passengers, but valuable merchandise. " I start at nine o'clock," said Captain Speedy, simply. " Are you and your party ready ? "

" We will be on board at nine o'clock," replied, no less simply, Mr. Fogg.

It was half-past eight. To disembark from the *Henrietta*, jump into a hack, hurry to the St. Nicholas, and return with Aouda, Passepartout, and even the inseparable Fix was the work of a brief time, and was performed by Mr. Fogg with the coolness which never abandoned him. They were on board when the *Henrietta* made ready to weigh anchor.

When Passepartout heard what this last voyage was going to cost, he uttered a prolonged " Oh ! " which extended throughout his vocal gamut.

As for Fix, he said to himself that the Bank of England would certainly not come out of this affair well indemnified. When they reached England, even if Mr. Fogg did not throw some handfuls of bank-bills into the sea, more than seven thousand pounds would have been spent !

CHAPTER XXXIII

IN WHICH PHILEAS FOGG SHOWS HIMSELF EQUAL TO
THE OCCASION

AN hour after, the *Henrietta* passed the lighthouse which marks the entrance of the Hudson, turned the point of Sandy Hook, and put to sea. During the day she skirted Long Island, passed Fire Island, and directed her course rapidly eastward.

At noon the next day, a man mounted the bridge to ascertain the vessel's position. It might be thought that this was Captain Speedy. Not the least in the world. It

was Phileas Fogg, Esquire. As for Captain Speedy, he was shut up in his cabin under lock and key, and was uttering loud cries, which signified an anger at once pardonable and excessive.

What had happened was very simple. Phileas Fogg wished to go to Liverpool, but the captain would not carry him there. Then Phileas Fogg had taken passage for Bordeaux, and, during the thirty hours he had been on board, had so shrewdly managed with his banknotes that the sailors and stokers, who were only an occasional crew, and were not on the best terms with the captain, went over to him in a body. This was why Phileas Fogg was in command instead of Captain Speedy ; why the captain was a prisoner in his cabin ; and why, in short, the *Henrietta* was directing her course towards Liverpool. It was very clear, to see Mr. Fogg manage the craft, that he had been a sailor.

How the adventure ended will be seen anon. Aouda was anxious, though she said nothing. As for Passepartout, he thought Mr. Fogg's manœuvre simply glorious. The captain had said "between eleven and twelve knots," and the *Henrietta* confirmed his prediction.

If, then—for there were "ifs" still—the sea did not become too boisterous, if the wind did not veer round to the east, if no accident happened to the boat or its machinery, the *Henrietta* might cross the three thousand miles from New York to Liverpool in the nine days, between the 12th and the 21st of December. It is true that, once arrived, the affair on board the *Henrietta*, added to that of the Bank of England, might create more difficulties for Mr. Fogg than he imagined or could desire.

During the first days, they went along smoothly enough. The sea was not very unpropitious, the wind seemed stationary in the north-east, the sails were hoisted, and the *Henrietta* ploughed across the waves like a real trans-Atlantic steamer.

Passepartout was delighted. His master's last exploit, the consequences of which he ignored, enchanted him.

Never had the crew seen so jolly and dexterous a fellow. He formed warm friendships with the sailors, and amazed them with his acrobatic feats. He thought they managed the vessel like gentlemen, and that the stokers fired up like heroes. His loquacious good-humour infected everyone. He had forgotten the past, its vexations and delays. He only thought of the end, so nearly accomplished ; and sometimes he boiled over with impatience, as if heated by the furnaces of the *Henrietta*. Often, also, the worthy fellow revolved around Fix, looking at him with a keen, distrustful eye ; but he did not speak to him, for their old intimacy no longer existed.

Fix, it must be confessed, understood nothing of what was going on. The conquest of the *Henrietta*, the bribery of the crew, Fogg managing the boat like a skilled seaman, amazed and confused him. He did not know what to think. For, after all, a man who began by stealing fifty-five thousand pounds might end by stealing a vessel ; and Fix was not unnaturally inclined to conclude that the *Henrietta*, under Fogg's command, was not going to Liverpool at all, but to some part of the world where the robber, turned into a pirate, would quietly put himself in safety. The conjecture was at least a plausible one, and the detective began to seriously regret that he had embarked on the affair.

As for Captain Speedy, he continued to howl and growl in his cabin ; and Passepartout, whose duty it was to carry him his meals, courageous as he was, took the greatest precautions. Mr. Fogg did not seem even to know that there was a captain on board.

On the 13th they passed the edge of the Banks of Newfoundland, a dangerous locality ; during the winter, especially, there are frequent fogs and heavy gales of wind. Ever since the evening before the barometer, suddenly falling, had indicated an approaching change in the atmosphere ; and during the night the temperature varied, the cold became sharper, and the wind veered to the south-east.

This was a misfortune. Mr. Fogg, in order not to deviate

from his course, furling his sails and increased the force of the steam ; but the vessel's speed slackened, owing to the state of the sea, the long waves of which broke against the stern. She pitched violently, and this retarded her progress. The breeze little by little swelled into a tempest, and it was to be feared that the *Henrietta* might not be able to maintain herself upright on the waves.

Passepartout's visage darkened with the skies, and for two days the poor fellow experienced constant fright. But Phileas Fogg was a bold mariner, and knew how to maintain headway against the sea ; and he kept on his course, without even decreasing his steam. The *Henrietta*, when she could not rise upon the waves, crossed them, swamping her deck, but passing safely. Sometimes the screw rose out of the water, beating its protruding end, when a mountain of water raised the stern above the waves ; but the craft always kept straight ahead.

The wind, however, did not grow as boisterous as might have been feared ; it was not one of those tempests which burst, and rush on with a speed of ninety miles an hour. It continued fresh, but, unhappily, it remained obstinately in the south-east, rendering the sails useless.

The 16th of December was the seventy-fifth day since Phileas Fogg's departure from London, and the *Henrietta* had not yet been seriously delayed. Half of the voyage was almost accomplished, and the worst localities had been passed. In summer, success would have been well-nigh certain. In winter, they were at the mercy of the bad season. Passepartout said nothing ; but he cherished hope in secret, and comforted himself with the reflection that, if the wind failed them, they might still count on the steam.

On this day the engineer came on deck, went up to Mr. Fogg, and began to speak earnestly with him. Without knowing why—it was a presentiment, perhaps—Passepartout became vaguely uneasy. He would have given one of his ears to hear with the other what the engineer was saying. He finally managed to catch a few words, and was

sure he heard his master say, "You are certain of what you tell me?"

"Certain, sir," replied the engineer. "You must remember that, since we started, we have kept up hot fires in all our furnaces, and, though we had coal enough to go on short steam from New York to Bordeaux, we haven't enough to go with all steam from New York to Liverpool."

"I will consider," replied Mr. Fogg.

Passepartout understood it all; he was seized with mortal anxiety. The coal was giving out! "Ah, if my master can get over that," muttered he, "he'll be a famous man!" He could not help imparting to Fix what he had overheard.

"Then you believe that we really are going to Liverpool?"

"Of course."

"Ass!" replied the detective, shrugging his shoulders and turning on his heel.

Passepartout was on the point of vigorously resenting the epithet, the reason of which he could not for the life of him comprehend; but he reflected that the unfortunate Fix was probably very much disappointed and humiliated in his self-esteem, after having so awkwardly followed a false scent around the world, and refrained.

And now what course would Phileas Fogg adopt? It was difficult to imagine. Nevertheless he seemed to have decided upon one, for that evening he sent for the engineer, and said to him, "Feed all the fires until the coal is exhausted."

A few moments after, the funnel of the *Henrietta* vomited forth torrents of smoke. The vessel continued to proceed with all steam on; but on the 18th, the engineer, as he had predicted, announced that the coal would give out in the course of the day.

"Do not let the fires go down," replied Mr. Fogg. "Keep them up to the last. Let the valves be filled."

Towards noon Phileas Fogg, having ascertained their position, called Passepartout, and ordered him to go for

Captain Speedy. It was as if the honest fellow had been commanded to unchain a tiger. He went to the poop, saying to himself, "He will be like a madman !"

In a few moments, with cries and oaths, a bomb appeared on the poop-deck. The bomb was Captain Speedy. It was clear that he was on the point of bursting. "Where are we ?" were the first words his anger permitted him to utter. Had the poor man been apoplectic, he could never have recovered from his paroxysm of wrath.

"Where are we ?" he repeated, with purple face.

"Seven hundred and seven miles from Liverpool," replied Mr. Fogg, with imperturbable calmness.

"Pirate !" cried Captain Speedy.

"I have sent for you, sir——"

"Pickaroon !"

"—sir," continued Mr. Fogg, "to ask you to sell me your vessel."

"No ! By all the devils, no !"

"But I shall be obliged to burn her."

"Burn the *Henrietta* !"

"Yes ; at least the upper part of her. The coal has given out."

"Burn my vessel !" cried Captain Speedy, who could scarcely pronounce the words. "A vessel worth fifty thousand dollars !"

"Here are sixty thousand," replied Phileas Fogg, handing the captain a roll of bank-bills. This had a prodigious effect on Andrew Speedy. An American can scarcely remain unmoved at the sight of sixty thousand dollars. The captain forgot in an instant his anger, his imprisonment, and all his grudges against his passenger. The *Henrietta* was twenty years old ; it was a great bargain. The bomb would not go off after all. Mr. Fogg had taken away the match.

"And I shall still have the iron hull," said the captain in a softer tone.

"The iron hull and the engine. Is it agreed ?"

“ Agreed.”

And Andrew Speedy, seizing the banknotes, counted them and consigned them to his pocket.

During this colloquy, Passepartout was as white as a sheet, and Fix seemed on the point of having an apoplectic fit. Nearly twenty thousand pounds had been expended, and Fogg left the hull and engine to the captain, that is, near the whole value of the craft ! It was true, however, that fifty-five thousand pounds had been stolen from the Bank.

When Andrew Speedy had pocketed the money, Mr. Fogg said to him, “ Don’t let this astonish you, sir. You must know that I shall lose twenty thousand pounds, unless I arrive in London by a quarter before nine on the evening of the 21st of December. I missed the steamer at New York, and as you refused to take me to Liverpool——”

“ And I did well ! ” cried Andrew Speedy ; “ for I have gained at least forty thousand dollars by it ! ” He added, more sedately, “ Do you know one thing, Captain——”

“ Fogg.”

“ Captain Fogg, you’ve got something of the Yankee about you.”

And, having paid his passenger what he considered a high compliment, he was going away, when Mr. Fogg said, “ The vessel now belongs to me ? ”

“ Certainly, from the keel to the truck of the masts—all the wood, that is.”

“ Very well. Have the interior seats, bunks, and frames pulled down, and burn them.”

It was necessary to have dry wood to keep the steam up to the adequate pressure, and on that day the poop, cabins, bunks, and the spare deck were sacrificed. On the next day, the 19th of December, the masts, rafts, and spars were burned ; the crew worked lustily, keeping up the fires. Passepartout hewed, cut, and sawed away with all his might. There was a perfect rage for demolition.

The railings, fittings, the greater part of the deck, and

top sides disappeared on the 20th, and the *Henrietta* was now only a flat hulk. But on this day they sighted the Irish coast and Fastnet Light. By ten in the evening they were passing Queenstown. Phileas Fogg had only twenty-four hours more in which to get to London ; that length of time was necessary to reach Liverpool, with all steam on. And the steam was about to give out altogether !

"Sir," said Captain Speedy, who was now deeply interested in Mr. Fogg's project, "I really commiserate you. Everything is against you. We are only opposite Queenstown."

"Ah," said Mr. Fogg, "is that place where we see the lights Queenstown?"

"Yes."

"Can we enter the harbour?"

"Not under three hours. Only at high tide."

"Stay," replied Mr. Fogg calmly, without betraying in his features that by a supreme inspiration he was about to attempt once more to conquer ill-fortune.

Queenstown is the Irish port at which the trans-Atlantic steamers stop to put off the mails. These mails are carried to Dublin by express trains always held in readiness to start ; from Dublin they are sent on to Liverpool by the most rapid boats, and thus gain twelve hours on the Atlantic steamers.

Phileas Fogg counted on gaining twelve hours in the same way. Instead of arriving at Liverpool the next evening by the *Henrietta*, he would be there by noon, and would therefore have time to reach London before a quarter before nine in the evening.

The *Henrietta* entered Queenstown Harbour at one o'clock in the morning, it then being high tide ; and Phileas Fogg, after being grasped heartily by the hand by Captain Speedy, left that gentleman on the levelled hulk of his craft, which was still worth half what he had sold it for.

The party went on shore at once. Fix was greatly tempted to arrest Mr. Fogg on the spot ; but he did not. Why ?

What struggle was going on within him ? Had he changed his mind about " his man " ? Did he understand that he had made a grave mistake ? He did not, however, abandon Mr. Fogg. They all got upon the train, which was just ready to start, at half-past one ; at dawn of day they were in Dublin ; and they lost no time in embarking on a steamer which, disdaining to rise upon the waves, invariably cut through them. "

Phileas Fogg at last disembarked on the Liverpool quay, at twenty minutes before twelve, 21st December. He was only six hours distant from London.

But at this moment Fix came up, put his hand upon Mr. Fogg's shoulder, and, showing his warrant, said, " You are really Phileas Fogg ? "

" I am."

" I arrest you in the Queen's name ! "

CHAPTER XXXIV

IN WHICH PHILEAS FOGG AT LAST REACHES LONDON

Phileas Fogg was in prison. He had been shut up in the Custom House, and he was to be transferred to London the next day.

Passepartout, when he saw his master arrested, would have fallen upon Fix had he not been held back by some policemen. Aouda was thunderstruck at the suddenness of an event which she could not understand. Passepartout explained to her how it was that the honest and courageous Fogg was arrested as a robber. The young woman's heart revolted against so heinous a charge, and when she saw that she could attempt or do nothing to save her protector, she wept bitterly.

As for Fix, he had arrested Mr. Fogg because it was his duty, whether Mr. Fogg were guilty or not.

The thought then struck Passepartout, that he was the cause of this new misfortune ! Had he not concealed Fix's errand from his master ? When Fix revealed his true character and purpose, why had he not told Mr. Fogg ? If the latter had been warned, he would no doubt have given Fix proof of his innocence, and satisfied him of his mistake ; at least, Fix would not have continued his journey at the expense and on the heels of his master, only to arrest him the moment he set foot on English soil. Passepartout wept till he was blind, and felt like blowing his brains out.

Aouda and he had remained, despite the cold, under the portico of the Custom House. Neither wished to leave the place ; both were anxious to see Mr. Fogg again.

That gentleman was really ruined, and that at the moment when he was about to attain his end. This arrest was fatal. Having arrived at Liverpool at twenty minutes before twelve on the 21st of December, he had till a quarter before nine that evening to reach the Reform Club, that is, nine hours and a quarter ; the journey from Liverpool to London was six hours.

If anyone, at this moment, had entered the Custom House, he would have found Mr. Fogg seated, motionless, calm, and without apparent anger, upon a wooden bench. He was not, it is true, resigned ; but this last blow failed to force him into an outward betrayal of any emotion. Was he being devoured by one of those secret rages, all the more terrible because contained, and which only burst forth, with an irresistible force, at the last moment ? No one could tell. There he sat, calmly waiting—for what ? Did he still cherish hope ? Did he still believe, now that the door of this prison was closed upon him, that he would succeed ?

However that may have been, Mr. Fogg carefully put his watch upon the table, and observed its advancing hands. Not a word escaped his lips, but his look was singularly set and stern. The situation, in any event, was a terrible one, and might be thus stated : if Phileas Fogg was honest he was ruined ; if he was a knave, he was caught.

Did escape occur to him ? Did he examine to see if there were any practicable outlet from his prison ? Did he think of escaping from it ? Possibly ; for once he walked slowly around the room. But the door was locked, and the window heavily barred with iron rods. He sat down again, and drew his journal from his pocket. On the line where these words were written, " 21st December, Saturday, Liverpool," he added, " 80th day, 11.40 a.m.," and waited.

The Custom House clock struck one. Mr. Fogg observed that his watch was two hours too fast.

Two hours ! Admitting that he was at this moment taking an express train, he could reach London and the Reform Club by a quarter before nine, p.m. His forehead slightly wrinkled.

At thirty-three minutes past two he heard a singular noise outside, then a hasty opening of doors. Passepartout's voice was audible, and immediately after that of Fix. Phileas Fogg's eyes brightened for an instant.

The door swung open, and he saw Passepartout, Aouda, and Fix, who hurried towards him.

Fix was out of breath, and his hair was in disorder. He could not speak. " Sir," he stammered, " sir—forgive me—a most—unfortunate resemblance—robber arrested three days ago—you—are free ! "

Phileas Fogg was free ! He walked to the detective, looked him steadily in the face, and with the only rapid motion he had ever made in his life, or which he ever would make, drew back his arms, and with the precision of a machine knocked Fix down.

" Well hit ! " cried Passepartout, "*Parbleu !* that's what you might call a good application of English fists ! "

Fix, who found himself on the floor, did not utter a word. He had only received his deserts. Mr. Fogg, Aouda, and Passepartout left the Custom House without delay, got into a cab, and in a few moments descended at the station.

Phileas Fogg asked if there was an express train about to

leave for London. It was forty minutes past two. The express train had left thirty-five minutes before.

Phileas Fogg then ordered a special train.

There were several rapid locomotives on hand ; but the railway arrangements did not permit the special train to leave until three o'clock.

At that hour Phileas Fogg, having stimulated the engineer by the offer of a generous reward, at last set out towards London with Aouda and his faithful servant.

It was necessary to make the journey in five hours and a half ; and this would have been easy on a clear road throughout. But there were forced delays, and when Mr. Fogg stepped from the train at the terminus, all the clocks in London were striking ten minutes before nine.¹

Having made the tour of the world, he was behind-hand five minutes. He had lost the wager !

CHAPTER XXXV

IN WHICH PHILEAS FOGG DOES NOT HAVE TO
REPEAT HIS ORDERS TO PASSEPARTOUT TWICE

The dwellers in Saville Row would have been surprised the next day, if they had been told that Phileas Fogg had returned home. His doors and windows were still closed, no appearance of change was visible.

After leaving the station, Mr. Fogg gave Passepartout instructions to purchase some provisions, and quietly went to his domicile.

He bore his misfortune with his habitual tranquillity. Ruined ! And by the blundering of the detective ! After having steadily traversed that long journey, overcome a hundred obstacles, braved many dangers, and still found time to do some good on his way, to fail near the goal by a

¹ A somewhat remarkable eccentricity on the part of the London clocks ?—TRANSLATOR.

sudden event which he could not have foreseen, and against which he was unarmed ; it was terrible ! But a few pounds were left of the large sum he had carried with him. There only remained of his fortune the twenty thousand pounds deposited at Barings, and this amount he owed to his friends of the Reform Club. So great had been the expense of his tour that, even had he won, it would not have enriched him ; and it is probable that he had not sought to enrich himself, being a man who rather laid wagers for honour's sake than for the stake proposed. But this wager totally ruined him.

Mr. Fogg's course, however, was fully decided upon ; he knew what remained for him to do.

A room in the house in Saville Row was set apart for Aouda, who was overwhelmed with grief at her protector's misfortune. From the words which Mr. Fogg dropped, she saw that he was meditating some serious project.

Knowing that Englishmen governed by a fixed idea sometimes resort to the desperate expedient of suicide, Passepartout kept a narrow watch upon his master, though he carefully concealed the appearance of so doing.

First of all, the worthy fellow had gone up to his room, and had extinguished the gas burner, which had been burning for eighty days. He had found in the letter-box a bill from the gas company, and he thought it more than time to put a stop to this expense, which he had been doomed to bear.

The night passed. Mr. Fogg went to bed, but did he sleep ? Aouda did not once close her eyes. Passepartout watched all night, like a faithful dog, at his master's door.

Mr. Fogg called him in the morning, and told him to get Aouda's breakfast, and a cup of tea and a chop for himself. He desired Aouda to excuse him from breakfast and dinner, as his time would be absorbed all day in putting his affairs to rights. In the evening he would ask permission to have a few moment's conversation with the young lady.

Passepartout, having received his orders, had nothing to do but obey them. He looked at his imperturbable master, and could scarcely bring his mind to leave him. His heart was full, and his conscience tortured by remorse ; for he accused himself more bitterly than ever of being the cause of the irretrievable disaster. Yes ! if he had warned Mr. Fogg, and had betrayed Fix's projects to him, his master would certainly not have given the detective passage to Liverpool, and then——

Passepartout could hold in no longer.

"My master ! Mr. Fogg !" he cried, "why do you not curse me ? It was my fault that——"

"I blame no one," returned Phileas Fogg, with perfect calmness. "Go !"

Passepartout left the room, and went to find Aouda, to whom he delivered his master's message.

"Madam," he added, "I can do nothing myself—nothing ! I have no influence over my master ; but you, perhaps——"

"What influence could I have ?" replied Aouda. "Mr. Fogg is influenced by no one. Has he ever understood that my gratitude to him is overflowing ? Has he ever read my heart ? My friend, he must not be left alone an instant ! You say he is going to speak with me this evening ?"

"Yes, madam ; probably to arrange for your protection and comfort in England."

"We shall see," replied Aouda, becoming suddenly pensive.

Throughout this day (Sunday) the house in Saville Row was as if uninhabited, and Phileas Fogg, for the first time since he had lived in that house, did not set out for his club when Westminster clock struck half-past eleven.

Why should he present himself at the Reform ? His friends no longer expected him there. As Phileas Fogg had not appeared in the saloon on the evening before (Saturday, the 21st of December, at a quarter before nine), he had lost his wager. It was not even necessary that he should go to his

bankers for the twenty thousand pounds ; for his antagonists already had his cheque in their hands, and they had only to fill it out and send it to the Barings to have the amount transferred to their credit.

Mr. Fogg, therefore, had no reason for going out, and so he remained at home. He shut himself up in his room, and busied himself putting his affairs in order. Passepartout continually ascended and descended the stairs. The hours were long for him. He listened at his master's door, and looked through the keyhole, as if he had a perfect right so to do, and as if he feared that something terrible might happen at any moment. Sometimes he thought of Fix, but no longer in anger. Fix, like all the world, had been mistaken in Phileas Fogg, and had only done his duty in tracking and arresting him ; while he, Passepartout—— This thought haunted him, and he never ceased cursing his miserable folly.

Finding himself too wretched to remain alone, he knocked at Aouda's door, went into her room, seated himself, without speaking, in a corner, and looked ruefully at the young woman. Aouda was still pensive.

About half-past seven in the evening Mr. Fogg sent to know if Aouda would receive him, and in a few moments he found himself alone with her.

Phileas Fogg took a chair, and sat down near the fireplace, opposite Aouda. No emotion was visible on his face. Fogg returned was exactly the Fogg who had gone away ; there was the same calm, the same impassibility.

He sat several minutes without speaking ; then, bending his eyes on Aouda, " Madam," said he, " will you pardon me for bringing you to England ? "

" I, Mr. Fogg ! " replied Aouda, checking the pulsations of her heart.

" Please let me finish," returned Mr. Fogg. " When I decided to bring you far away from the country which was so unsafe for you, I was rich, and counted on putting a portion of my fortune at your disposal ; then your

existence would have been free and happy. But now I am ruined."

"I know it, Mr. Fogg," replied Aouda; "and I ask you in my turn, will you forgive me for having followed you, and—who knows?—for having, perhaps, delayed you, and thus contributed to your ruin?"

"Madam, you could not remain in India, and your safety could only be assured by bringing you to such a distance that your persecutors could not take you."

"So, Mr. Fogg," resumed Aouda, "not content with rescuing me from a terrible death, you thought yourself bound to secure my comfort in a foreign land?"

"Yes, madam; but circumstances have been against me. Still, I beg to place the little I have left at your service."

"But what will become of you, Mr. Fogg?"

"As for me, madam," replied the gentleman, coldly, "I have need of nothing."

"But how do you look upon the fate, sir, which awaits you?"

"As I am in the habit of doing."

"At least," said Aouda, "want should not overtake a man like you. Your friends——"

"I have no friends, madam."

"Your relatives——"

"I have no longer any relatives."

"I pity you, then, Mr. Fogg, for solitude is a sad thing, with no heart to which to confide your griefs. They say, though, that misery itself, shared by two sympathetic souls, may be borne with patience."

"They say so, madam."

"Mr. Fogg," said Aouda, rising and seizing his hand, "do you wish at once a kinswoman and friend? Will you have me for your wife?"

Mr. Fogg, at this, rose in his turn. There was an unwonted light in his eyes, and a slight trembling of his lips. Aouda looked into his face. The sincerity, rectitude, firmness, and sweetness of this soft glance of a noble woman, who could

dare all to save him to whom she owed all, at first astonished, then penetrated him. He shut his eyes for an instant, as if to avoid her look. When he opened them again, "I love you!" he said, simply. "Yes, by all that is holiest, I love you, and I am entirely yours!"

"Ah!" cried Aouda, pressing his hand to her heart.

Passepartout was summoned and appeared immediately. Mr. Fogg still held Aouda's hand in his own; Passepartout understood, and his big, round face became as radiant as the tropical sun at its zenith.

Mr. Fogg asked him if it was not too late to notify the Reverend Samuel Wilson, of Marylebone parish, that evening.

Passepartout smiled his most genial smile, and said, "Never too late."

It was five minutes past eight.

"Will it be for to-morrow, Monday?"

"For to-morrow, Monday," said Mr. Fogg, turning to Aouda.

"Yes; for to-morrow, Monday," she replied.

Passepartout hurried off as fast as his legs could carry him.

CHAPTER XXXVI

IN WHICH PHILEAS FOGG'S NAME IS ONCE MORE
AT A PREMIUM ON 'CHANGE

It is time to relate what a change took place in English public opinion when it transpired that the real bank-robber, a certain James Strand, had been arrested, on the 17th day of December, at Edinburgh. Three days before, Phileas Fogg had been a criminal, who was being desperately followed up by the police; now he was an honourable gentleman, mathematically pursuing his eccentric journey round the world.

The papers resumed their discussion about the wager ; all those who had laid bets, for or against him, revived their interest, as if by magic ; the " Phileas Fogg bonds " again became negotiable, and many new wagers were made. Phileas Fogg's name was once more at a premium on 'Change.

His five friends of the Reform Club passed these three days in a state of feverish suspense. Would Phileas Fogg, whom they had forgotten, reappear before their eyes ! Where was he at this moment ? The 17th of December, the day of James Strand's arrest, was the seventy-sixth since Phileas Fogg's departure, and no news of him had been received. Was he dead ? Had he abandoned the effort, or was he continuing his journey along the route agreed upon ? And would he appear on Saturday, the 21st of December, at a quarter before nine in the evening, on the threshold of the Reform Club saloon ?

The anxiety in which, for three days, London society existed, cannot be described. Telegrams were sent to America and Asia for news of Phileas Fogg. Messengers were despatched to the house in Saville Row morning and evening. No news. The police were ignorant what had become of the detective, Fix, who had so unfortunately followed up a false scent. Bets increased, nevertheless, in number and value. Phileas Fogg, like a racehorse, was drawing near his last turning-point. The bonds were quoted, no longer at a hundred below par, but at twenty, at ten, and at five ; and paralytic old Lord Albemarle bet even in his favour.

A great crowd was collected in Pall Mall and the neighbouring streets on Saturday evening ; it seemed like a multitude of brokers permanently established around the Reform Club. Circulation was impeded, and everywhere disputes, discussions, and financial transactions were going on. The police had great difficulty in keeping back the crowd, and as the hour when Phileas Fogg was due approached, the excitement rose to its highest pitch.

The five antagonists of Phileas Fogg had met in the great saloon of the club. John Sullivan and Samuel Fallentin, the bankers, Andrew Stuart, the engineer, Gauthier Ralph, the director of the Bank of England, and Thomas Flanagan, the brewer, one and all waited anxiously.

When the clock indicated twenty minutes past eight, Andrew Stuart got up, saying, "Gentlemen, in twenty minutes the time agreed upon between Mr. Fogg and ourselves will have expired."

"What time did the last train arrive from Liverpool?" asked Thomas Flanagan.

"At twenty-three minutes past seven," replied Gauthier Ralph; "and the next does not arrive till ten minutes after twelve."

"Well, gentlemen," resumed Andrew Stuart, "if Phileas Fogg had come in the 7.23 train, he would have got here by this time. We can, therefore, regard the bet as won."

"Wait; don't let us be too hasty," replied Samuel Fallentin. "You know that Mr. Fogg is very eccentric. His punctuality is well known; he never arrives too soon, or too late; and I should not be surprised if he appeared before us at the last minute."

"Why," said Andrew Stuart nervously, "if I should see him, I should not believe it was he."

"The fact is," resumed Thomas Flanagan, "Mr. Fogg's project was absurdly foolish. Whatever his punctuality, he could not prevent the delays which were certain to occur; and a delay of only two or three days would be fatal to his tour."

"Observe, too," added John Sullivan, "that we have received no intelligence from him, though there are telegraphic lines all along his route."

"He has lost, gentleman," said Andrew Stuart,— "he has a hundred times lost! You know, besides, that the *China*—the only steamer he could have taken from New

York to get here in time—arrived yesterday. I have seen a list of the passengers, and the name of Phileas Fogg is not among them. Even if we admit that fortune has favoured him, he can scarcely have reached America. I think he will be at least twenty days behind-hand, and that Lord Albemarle will lose a cool five thousand."

"It is clear," replied Gauthier Ralph; "and we have nothing to do but to present Mr. Fogg's cheque at Barings to-morrow."

At this moment, the hands of the club clock pointed to twenty minutes to nine.

"Five minutes more," said Andrew Stuart.

The five gentlemen looked at each other. Their anxiety was becoming intense; but, not wishing to betray it, they readily assented to Mr. Fallentin's proposal of a rubber.

"I wouldn't give up my four thousand of the bet," said Andrew Stuart, as he took his seat, "for three thousand nine hundred and ninety-nine."

The clock indicated eighteen minutes to nine.

The players took up their cards, but could not keep their eyes off the clock. Certainly, however secure they felt, minutes had never seemed so long to them!

"Seventeen minutes to nine," said Thomas Flanagan, as he cut the cards which Ralph handed to him.

Then there was a moment of silence. The great saloon was perfectly quiet; but the murmurs of the crowd outside were heard, with now and then a shrill cry. The pendulum beat the seconds, which each player eagerly counted, as he listened, with mathematical regularity.

"Sixteen minutes to nine!" said John Sullivan, in a voice which betrayed his emotion.

One minute more, and the wager would be won. Andrew Stuart and his partners suspended their game. They left their cards, and counted the seconds.

At the fortieth second, nothing. At the fiftieth, still nothing.

At the fifty-fifth, a loud cry was heard in the street, followed by applause, hurrahs, and some fierce growls.

The players rose from their seats.

At the fifty-seventh second the door of the saloon opened ; and the pendulum had not beat the sixtieth second when Phileas Fogg appeared, followed by an excited crowd who had forced their way through the club doors, and in his calm voice, said, " Here I am, gentlemen ! "

CHAPTER XXXVII

IN WHICH IT IS SHOWN THAT PHILEAS FOGG
GAINED NOTHING BY HIS TOUR AROUND THE
WORLD, UNLESS IT WERE HAPPINESS

Yes ; Phileas Fogg in person.

The reader will remember that at five minutes past eight in the evening—about five and twenty hours after the arrival of the travellers in London—Passepartout had been sent by his master to engage the services of the Reverend Samuel Wilson in a certain marriage ceremony, which was to take place the next day.

Passepartout went on his errand enchanted. He soon reached the clergyman's house, but found him not at home. Passepartout waited a good twenty minutes, and when he left the reverend gentleman, it was thirty-five minutes past eight. But in what a state he was ! With his hair in disorder, and without his hat, he ran along the street as never man was seen to run before, overturning passers-by, rushing over the sidewalk like a waterspout.

In three minutes he was in Saville Row again, and staggered back into Mr. Fogg's room.

He could not speak.

" What is the matter ? " asked Mr. Fogg.

" My master ! " gasped Passepartout—" marriage—impossible——"

"Impossible?"

"Impossible—for to-morrow."

"Why so?"

"Because to-morrow—is Sunday!"

"Monday," replied Mr. Fogg.

"No—to-day—is Saturday."

"Saturday? Impossible!"

"Yes, yes, yes, yes!" cried Passepartout. "You have made a mistake of one day! We arrived twenty-four hours ahead of time; but there are only ten minutes left!"

Passepartout had seized his master by the collar, and was dragging him along with irresistible force.

Phileas Fogg, thus kidnapped, without having time to think, left his house, jumped into a cab, promised a hundred pounds to the cabman, and, having run over two dogs and overturned five carriages, reached the Reform Club.

The clock indicated a quarter before nine when he appeared in the great saloon.

Phileas Fogg had accomplished the journey round the world in eighty days!

Phileas Fogg had won his wager of twenty thousand pounds!

How was it that a man so exact and fastidious could have made this error of a day? How came he to think that he had arrived in London on Saturday, the twenty-first day of December, when it was really Friday, the twentieth, the seventy-ninth day only from his departure?

The cause of the error is very simple.

Phileas Fogg had, without suspecting it, gained one day on his journey, and this merely because he had travelled constantly *eastward*; he would, on the contrary, have lost a day had he gone in the opposite direction, that is, *westward*.

In journeying eastward he had gone towards the sun, and the days therefore diminished for him as many times four minutes as he crossed degrees in this direction. There

are three hundred and sixty degrees on the circumference of the earth ; and these three hundred and sixty degrees, multiplied by four minutes, gives precisely twenty-four hours—that is, the day unconsciously gained. In other words, while Phileas Fogg, going eastward, saw the sun pass the meridian *eighty* times, his friends in London only saw it pass the meridian *seventy-nine* times. This is why they awaited him at the Reform Club on Saturday, and not Sunday, as Mr. Fogg thought.

And Passepartout's famous family watch, which had always kept London time, would have betrayed this fact, if it had marked the days as well as the hours and the minutes !

Phileas Fogg, then, had won the twenty thousand pounds ; but, as he had spent nearly nineteen thousand on the way, the pecuniary gain was small. His object was, however, to be victorious, and not to win money. He divided the one thousand pounds that remained between Passepartout and the unfortunate Fix, against whom he cherished no grudge. He deducted, however, from Passepartout's share the cost of the gas which had burned in his room for nineteen hundred and twenty hours, for the sake of regularity.

That evening, Mr. Fogg, as tranquil and phlegmatic as ever, said to Aouda : “ Is our marriage still agreeable to you ? ”

“ Mr. Fogg,” replied she, “ it is for me to ask that question. You were ruined, but now you are rich again.”

“ Pardon me, madam ; my fortune belongs to you. If you had not suggested our marriage, my servant would not have gone to the Reverend Samuel Wilson's, I should not have been apprised of my error, and——”

“ Dear Mr. Fogg ! ” said the young woman.

“ Dear Aouda ! ” replied Phileas Fogg.

It need not be said that the marriage took place forty-eight hours after, and that Passepartout, glowing and

dazzling, gave the bride away. Had he not saved her, and was he not entitled to this honour ?

The next day, as soon as it was light, Passepartout rapped vigorously at his master's door. Mr. Fogg opened it, and asked, "What's the matter, Passepartout ?"

"What is it, sir ? Why, I've just this instant found out——"

"What ?"

"That we might have made the tour of the world in only seventy-eight days."

"No doubt," returned Mr. Fogg, "by not crossing India. But if I had not crossed India, I should not have saved Aouda ; she would not have been my wife, and——"

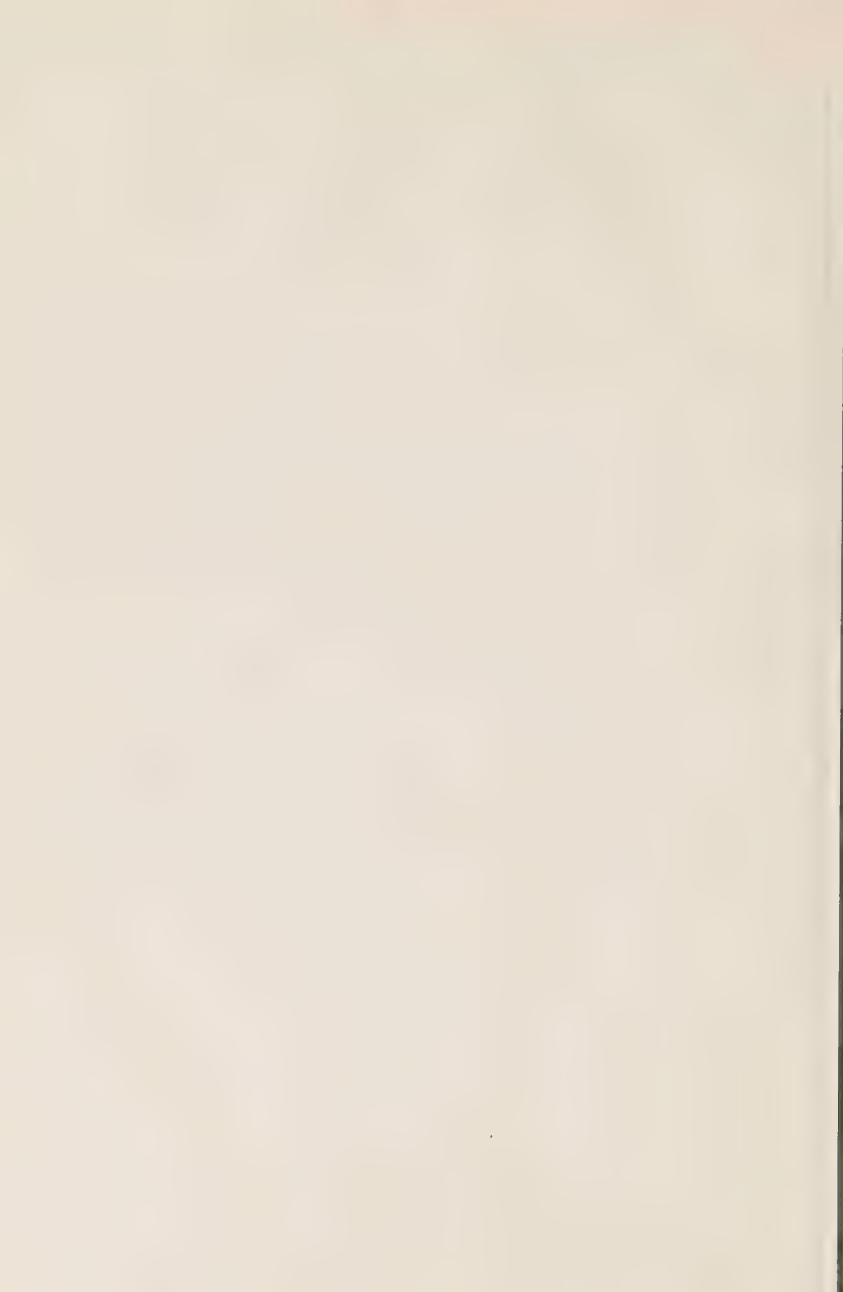
Mr. Fogg quietly shut the door.

Phileas Fogg had won his wager, and had made his journey around the world in eighty days. To do this he had employed every means of conveyance—steamers, railways, carriages, yachts, trading-vessels, sledges, elephants. The eccentric gentleman had throughout displayed all his marvellous qualities of coolness and exactitude. But what then ? What had he really gained by all this trouble ? What had he brought back from this long and weary journey ?

Nothing, say you ? Perhaps so ; nothing but a charming woman, who, strange as it may appear, made him the happiest of men !

Truly, would you not for less than that make the tour around the world ?

FLOATING ISLAND



FLOATING ISLAND

PART ONE

CHAPTER I

When a journey begins badly it rarely ends well. At least that ought to have been the opinion of the four instrumentalists whose instruments lay on the ground, the carriage in which they were riding having suddenly upset against a mound by the side of the road.

"Anybody hurt?" asked the first, actively springing to his feet.

"I have got off with a scratch," replied the second, wiping his cheek, striped by a piece of glass.

"And I with a graze," replied the third, whose calf was bleeding.

There was nothing serious as yet.

"And my violoncello?" said the fourth. "It is to be hoped nothing has happened to my violoncello."

Fortunately the cases were untouched.

Neither the violoncello, nor the two violins, nor the alto had suffered from the shock, and it was hardly necessary to put them in tune. They were high-class instruments, of course.

"Confound that railway which left us in distress when we had only gone half-way," said one.

"Confound that carriage which has thrown us out in the open country," retorted another.

"Just at the moment night was beginning," added a third.

"Fortunately our concert is announced for the day after to-morrow," observed the fourth.

The driver had suffered most, having been pitched off his seat as the front axle broke. The damage was restricted to a few contusions more painful than serious; but he could

not walk on account of a sprain. Hence the necessity of finding some means of transport to the nearest village.

It was a miracle, indeed, that somebody had not been killed. The road winds across a mountainous country, skirting high precipices, bordered in many places with deep, tumultuous torrents and crossed by fords only passable with difficulty. If the axle had broken a moment sooner the vehicle would have rolled deep down the rocks, and no one could have survived the catastrophe.

Anyhow, the carriage was useless. One of the two horses, whose head had struck against a sharp stone, was gasping on the ground. The other was severely wounded on the quarter ; so that there were no horses and no carriage.

And the quartette were a good twenty miles from San Diego.

But why had four musicians, French by nationality, and Parisians by birth, ventured across these out-of-the-way regions of Lower California ?

Why ? We will tell you in twenty lines.

At this same time a feeling for art had developed among the Americans ; and if their productions were of limited number in the domain of the beautiful—if their national genius was still somewhat refractory in painting, sculpture, and music—the taste for good work was, at least, widely spread among them. By purchasing, for their weight in gold, the pictures of old and modern masters for public or private galleries ; by engaging, at enormous prices, lyrical and dramatic artistes of renown, instrumentalists of the highest talent, they had infused among themselves that sense of beautiful and noble things which they had been in want of so long.

When this infatuation was at its height, four instrumentalists of ability conceived the idea of tempting success and fortune in the United States of America. Four excellent fellows, old pupils of the Conservatoire, well known in Paris, much appreciated by the audiences of what is known as " chamber music," which was then little known in North

America. With what rare perfection, what marvellous time, what profound feeling, they interpreted the works of Mozart, of Beethoven, of Mendelssohn, of Haydn, of Chopin, written for four-stringed instruments, a first and second violin, alto, and violoncello. The success of the quartette was all the more intelligible, as at the time people were beginning to tire of formidable orchestras. That music is only an artistic combination of sonorous waves may be true, but there is no reason why these waves should be let loose in deafening tempests.

Yvernès—first violin—thirty-two years old, above the medium height, slight in build, fair, curly hair, smooth face, large black eyes, long hands.

Frascolin—second violin—thirty years old, short, with a tendency to stoutness—which he by no means liked—brown in hair and brown in beard, big in the head, black eyes, and a long nose, marked at the side with red by the pinch of his gold eyeglasses—which he could not do without—a good fellow, good-natured in every way, acting as the banker of the quartette, preaching economy, and never listened to, not at all envious of the success of his comrade, having no ambition of being promoted as solo violin, excellent musician nevertheless—and then wearing but a simple dust-coat over his travelling-suit.

Pinchinat—alto, commonly addressed as “his Highness”—twenty-seven years of age, the youngest of the troupe, the most frolicsome too, one of those incorrigibles who are boys all their life, a fine head, intelligent eyes, always wide-awake, hair approaching to red, pointed moustache, teeth white and sharp, tongue never still, never tired of puns and nonsense, and alert for repartee, invariably good-humoured, for ever making light of the discomforts that fell to his comrades, and therefore continually being reprimanded and taken up short by the chief of the Quartette Party.

For it had a chief, the violoncellist, Sebastien Zorn, chief by his talent, chief by his age, for he was fifty, short, rotund,

hair abundant, and curled on the temples, moustache bristling and losing itself in the whiskers which ended in points, complexion brick red, eyes gleaming through the glasses of his spectacles, which he doubled by means of an eyeglass when he read music, hands plump, the right ornamented with large rings on the second and little finger.

The quartette are now introduced as if they were before you on a platform. We know the types, if not very original, at least very distinct, of which it was composed. As the reader allows the incidents of this strange history to unroll themselves he will see to what adventures were destined these four Parisians, who, after receiving so many bravos throughout the States of the American Confederation, were to be transported.

While Zorn fretted and fumed, and patted the case of his violoncello to make sure that it was safe and sound, Frascolin went up to the driver.

"Well, my friend," he said ; " what are we to do now, if you please ? "

"What you can do when you have neither a carriage nor a horse, and that is to wait."

"Wait for what comes," said Pinchinat.

"And if nothing comes ? "

"We must look for it," said Frascolin, whose practical mind never failed him.

"Where ? " roared Zorn, in a great state of agitation.

"Where it is," replied the driver.

"Is that the way you ought to answer ? " said the 'cellist, in a voice that gradually mounted towards the high notes. "What ! A clumsy fellow who pitches us out, smashes his carriage, lames his horses, and then contents himself with saying, ' Get out of it as you like ! ' "

Carried away by his natural loquacity, Zorn began to launch forth into an interminable series of objurgations, all of them of no use, when Frascolin interrupted him :

"Allow me, my old Zorn."

And then, addressing himself to the driver, he asked :

"Where are we, my friend?"

"Five miles from Freschal."

"A railway station?"

"No, a village near the coast."

"Where can we find a carriage?"

"A carriage, nowhere—perhaps a cart."

"A bullock cart," exclaimed Pinchinat.

"What does it matter?" said Frascolin.

"Eh!" resumed Zorn. "Ask him if there is a hotel in this hole of a Freschal. I have had enough for to-night."

"My friend," asked Frascolin, "is there any hotel in Freschal?"

"Yes, the one where we were to change horses."

"And to get there we have only to keep on the main road?"

"Straight on."

"Let us be off!" said the 'cellist.

"But," said Pinchinat, "this poor fellow. It will be cruel to leave him here in distress. Look here, my friend, could you not come along if we were to help you?"

"Impossible!" replied the driver. "Besides, I prefer to remain here with my carriage. When daylight comes I shall see how to get out of this."

"When we get to Freschal," said Frascolin, "we can send you help."

"Yes, the hotel-keeper knows me, and will not let me remain here in this state."

"Shall we go?" asked the 'cellist, picking up the case of his instrument.

"In a moment," replied Pinchinat. "Just lend a hand to lift the driver to the side of the road."

Pinchinat and Frascolin lifted him up, and placed him against the roots of a large tree, the lower branches of which formed a cradle of verdure as they fell.

"Shall we go?" roared Zorn for the third time, having hoisted his case on to his back by means of a double strap arranged for the purpose.

"We have done now," said Frascolin, who then addressed the man, saying :

"It is understood that the hotel-keeper at Freschal will send you help. Till then you want nothing, is that so?"

"Yes," said the driver, "unless you happen to have a drink with you."

Pinchinat's flask happened to be full, and he willingly made the sacrifice.

"With that, my good man," said he, "you will never catch cold to-night—inside you."

CHAPTER II

It was about eight o'clock when Sebastien Zorn and his companions started towards the coast, as directed by the driver. As they had only their leather violin cases, light and handy, the violinists had little reason to grumble. Neither the wise Frascolin, nor the cheery Pinchinat, nor the idealist Yvernès had a word of complaint. But the 'cellist with his case—a cupboard as it were on his back! Knowing his character, we can understand that he found every opportunity of working himself into a rage. Hence groans and grunts exhaling under the primitive forms of "ahs," and "ohs," and "oufs."

The darkness was already profound. Thick clouds chased each other across the sky, drifting apart into narrow rifts, from which occasionally peeped a fitful moon, almost in its first quarter. Somehow, why we know not, unless it were that he was peevish and irritable, the pale Phœbe did not please Sebastien Zorn. He pointed his finger at her, exclaiming :

"What are you doing there with your stupid face? I know nothing more imbecile than that slice of unripe melon up there!"

"It would be better if the moon were to look us in the face," said Frascolin.

“ And for what reason ? ” asked Pinchinat.

“ Because we could see it more clearly.”

“ O chaste Diana ! ” declaimed Yvernès. “ O messenger of the peaceful night ! O pale satellite of the earth ! O adored idol of the adorable Endymion ! ”

“ Have you finished your ballad ? ” asked the 'cellist.

“ When the first violins take to flourishing on the fourth string——”

“ Take longer strides,” said Frascolin, “ or we shall have to sleep under the stars.”

“ If there are any,” observed Pinchinat. “ And lose our concert at San Diego.”

“ A fine idea, my word ! ” exclaimed Zorn, shaking his box, which gave forth a plaintive sound.

“ But this idea, my old friend, was yours,” said Pinchinat.

“ Mine ? ”

“ Undoubtedly ! That we did not remain at San Francisco, when we had quite a collection of Californian ears to charm.”

“ Once more,” asked the 'cellist, “ why did we start ? ”

“ Because you wished it ! ”

“ Well, I must admit that it was a deplorable inspiration, and if——”

“ Ah, my friends ! ” said Yvernès, pointing towards a point in the sky where a narrow moonray fell on the whitish edges of a cloud.

“ What is the matter, Yvernès ? ”

“ Look at that cloud turning into the shape of a dragon, its wings open, a peacock's tail eyed as with the hundred eyes of Argus.”

Perhaps Sebastien Zorn did not possess that power of hundredfold vision which distinguished the guardian of the son of Machus, for he did not notice a deep rut into which he trod. Consequently he fell on his face, with his box on his back, and looked like some huge beetle creeping over the ground.

Violent rage of the instrumentalist—and he had cause

to be angry—and then objurgations on account of the first violin's admiration of the aerial monster.

"It is the fault of Yvernès !" said Sebastien Zorn. "If I had not been looking at that confounded dragon——"

"It is no longer a dragon, it is a jar ! With the gift of imagination but feebly developed, you can see it in the hands of Hebe, who is pouring out the nectar——"

"Take care that there is not too much water in that nectar," exclaimed Pinchinat, "and that your charming goddess of youth does not give us an overdose of it."

Here was another trouble in store ; rain was apparently coming. Prudence required that they should make haste so as to get into shelter at Freschal.

They picked up the 'cellist, as angry as he could be. They put him on his legs, growling all the time. Frascolin good-naturedly offered to carry the case, but this Zorn refused. Separate himself from his instrument ! But he had to give in, and this precious half passed on to the back of the useful Frascolin, who entrusted his light violin case to Zorn.

The route was resumed. They walked at a good pace for two miles. No incident worth mentioning ; the night getting blacker and blacker with every promise of rain. A few drops fell, very large ones, a proof that they came from clouds high in the air and stormy. But Hebe's jar did not overflow, and our four travellers hoped to reach Freschal perfectly dry.

Careful precautions were constantly necessary against falls on the dark road, deeply cut into by ravines, turning suddenly, bordered by high crags, skirting gloomy precipices with the roar of the torrents beneath.

Yvernès thought the position was poetical ; Frascolin that it was alarming. There was the fear of certain meetings which make the safety of travellers on the roads of Lower California rather problematical. The only weapons possessed by the quartette were the bows of the violins and the 'cello, and these would appear to be insufficient in a country

where Colt's revolvers were invented. If Sebastien Zorn and his comrades had been Americans, they would have been furnished with one of those engines of warfare, kept in a special pocket of the trousers. Even for a trip from San Francisco to San Diego a real Yankee would never have started without carrying a six-shooter. But Frenchmen had not thought it necessary. We may add that they had not thought about it, and perhaps would repent it. Pinchinat marched at the head, peering right and left as he walked.

Suddenly Pinchinat stopped still. Frascoli, who was behind him, also stopped.

Zorn and Yvernès were up with them immediately.

"What is it?" asked the second violin.

"I thought I saw something," said the alto.

And this was no joke on his part. Really there was a form moving amid the trees.

"Human or animal?" asked Frascolin.

"I do not know."

Which was the more formidable no one would have ventured to say. They crowded together, without retreating, without uttering a word.

Through a rift in the clouds the rays of the moon lighted the dome of this gloomy forest, and fluttered to the ground through the branches of the sequoias. For a hundred yards or so the surroundings were visible.

Pinchinat had not been the dupe of illusion. Too large for a man, the mass could only be a big quadruped. What quadruped? A wild beast? A wild beast certainly. But what wild beast?

"A bear!" replied Frascolin.

It was a bear, and a large bear too. Lions, tigers, leopards are not met with in these forests of Lower California. Bears are, however, constantly found there, and encounters with them are generally disagreeable.

No surprise will be felt at the Parisians, with one accord, resolving to get out of the way of this one. Besides, was he not at home? And so the group closed up and retreated

backwards, facing the bear, but moving slowly and deliberately, without seeming to be running away.

The bear followed at a slow pace, shaking his fore-paws and balancing himself on his haunches. Gradually he approached, and his demonstrations became hostile—gruff growls and a snapping of the jaws, which were rather alarming.

“Suppose we run each on his own account?” proposed Pinchinat.

“Do nothing of the sort,” replied Frascolin. “One of us would be sure to be caught, and who would pay for the others?”

The imprudence was not committed; it was evident that its consequences might be disastrous.

The quartette thus arrived huddled together on the edge of the clearing, where the darkness was not so great. The bear had approached within a dozen yards. Did the spot appear to him convenient for an attack? Probably, for his growls redoubled, and he hastened his advance.

Precipitate retreat of the group, and earnest appeals from the second violin, “Be cool! be cool, my friends!”

The clearing was crossed and they found the shelter of the trees. But there the peril was as great. By running from one tree to another, the animal could leap on them without its being possible to foresee his attack, and he was about to act in this way, when his terrible growlings ceased, he began to halt——

The deep gloom was filled with a penetrating musical sound, an expressive *largo*, in which the soul of an artiste was fully revealed.

It was Yvernès, who had drawn his violin from its case and made it vibrate under the powerful caress of the bow. An idea of genius! Why should not the musicians owe their safety to music? Had not the wild beasts run to the knees of Orpheus? It seemed as though this Californian bear was as artistically gifted as his fellows in the fable, for his fierceness disappeared, and, as the quartette

retreated in good order, he followed them uttering little cries of approval. It would not have taken much to make him say "Bravo !"

A quarter of an hour later Zorn and his companions were at the edge of the wood. They crossed it, Yvernès fiddling all the time.

The animal stopped. It looked as though he had no intention of going farther. He patted his big paws against each other.

And then Pinchinat also seized his instrument, and shouted :

"The dancing bear. Come on !"

And while the first violin ploughed away steadily at the well-known tune in the major, the alto assisted with a bass shrill and false in the minor.

The bear began to dance, lifting the right foot, lifting the left foot, turning and twisting, while the four men went farther and farther away.

"Well," said Pinchinat, "he is only a circus bear."

"It does not matter," replied Frascolin, "Yvernès had a capital idea."

"Let us run for it," said the 'cellist, "and don't look behind."

It was about nine o'clock when the four disciples of Apollo arrived at Freschal. They had come along splendidly during the latter half of their journey.

Some forty wooden houses around a square planted with beeches, that was Freschal, a village isolated in the country and about two miles from the coast.

Our artistes glided between a few houses shaded with large trees, came out on the square, looked up at the humble spire of a little church, stopped, formed in a circle as if they were about to give a performance, and began to talk.

"Is this a village ?" asked Pinchinat.

"Did you expect to find a city like Philadelphia or New York ?" asked Frascolin.

"But your village is asleep!" replied Sebastien Zorn.

"Awake not a village that sleeps," sighed Yvernès.

"On the contrary," said Pinchinat, "wake it up well."

And, unless they were to spend the night in the open air, they would have to do so.

Yet the place was quite deserted, the silence complete. Not a shutter was open, not a light was at a window.

"And where is the hotel?" asked Frascolin.

Yes, the hotel which the driver had mentioned, where travellers in distress would receive good welcome and treatment. And the hotel-keeper who would send help to the unfortunate coachman. Had the poor man dreamt of these things? Or—another suggestion—had Zorn and his companions gone astray? Was this really Freschal?

These questions required an immediate reply. The villagers must be applied to for information, and the door of one of the houses must be knocked at; that of the hotel if possible, if by a lucky chance they could find which it was.

The four musicians began to reconnoitre round the place, prowling along the front of the houses, trying to find a sign hanging overhead. But there was nothing to show them which was the hotel.

As they could not find the hotel, perhaps there was some private house that would give them shelter. What native of Freschal would refuse a couple of dollars for a supper and a bed?

"Let us knock," said Frascolin.

They knocked three or four times with the same result. Not a door, not a window opened.

"We are deceived," said Yvernès, "it is not a village, it is a cemetery."

What was to be done, as the silence remained unbroken? Continue the journey towards San Diego? They were dying—that is the word—of hunger and fatigue. And then what road were they to follow without a guide through this dark night? Try to reach another

village ? Which one ? According to the coachman, there was no other village on this part of the coast. The best thing they could do was to wait for daylight. But to spend six hours without shelter beneath a sky overcast with heavy clouds threatening rain every instant—that was not to be thought of, even by artistes.

Pinchinat had an idea. His ideas were not always excellent, but they abounded in his brain. This one, however, obtained the approval of the wise Frascolin.

“ My friends,” said he, “ why should not what succeeded with a bear succeed with a Californian village ? We tamed him with a little music ; let us wake up these rustics with a vigorous concert.”

“ We might try that,” replied Frascolin.

Zorn did not wait for Pinchinat to finish. His case was opened, his 'cello upright on its steel point, for he had no seat, his bow in hand, ready to extract all the human voices stored up in the sonorous carcase.

Almost immediately his comrades were ready to follow him to the utmost limits of their art.

Behold them given up to their inspiration. Never perhaps have they played with more talent and more soul in the concert halls and theatres of the American Union. Space is filled with sublime harmony, and unless they were deaf how could human beings resist it ? Had it been a cemetery, as Yvernès pretended, the tombs would have opened at the music's charm, the dead would have risen, and the skeletons clapped hands.

But none of the houses opened ; the sleepers did not awake. The piece ended in its powerful *finale*, yet Freschal gave no sign of life.

“ Ah ! ” exclaimed Zorn, in a fury. “ Is it like that ? They want a serenade like their bears for their savage ears ? Be it so ! Let us have it over again ; but you, Yvernès, play in D ; you, Frascolin, in E ; you, Pinchinat, in G. I will keep to B flat ! and now then, with all your might.”

What discord ! What ear-torture !

Pinchinat's idea was excellent. What admirable execution could not obtain this absurdity did. Freschal began to awake. Lights appeared. Windows opened here and there. The natives of the village were not dead, for they gave signs of life. They were not deaf, for they heard and listened.

"They are going to throw apples at us," said Pinchinat, during a pause, for the time throughout had been scrupulously kept.

"So much the better," said the practical Frascolin, "we will eat them."

And at Zorn's command the players suddenly shifted into their proper key, and ended with a perfect chord of four different notes.

No ! They were not apples that came from the twenty or thirty open windows, but cheers. Never had the Freschalian ears been filled with such musical delights ! And there could be no doubt that every house was ready to receive with hospitality such incomparable players.

But while they were engaged in their performance, a spectator had approached them within a few yards without being seen. This personage had descended from a sort of electrical tram-car at one angle of the square. He was a man of tall stature, and somewhat corpulent, so far as could be judged in the darkness.

While our Parisians were asking if, after all, the windows and the doors of the houses were going to open to receive them—which appeared at least to be rather uncertain—the new arrival approached, and said in an amiable tone :

"I am a lover of music, gentlemen, and I have the very great pleasure of applauding you."

"For our last piece ?" replied Pinchinat, ironically.

"No, gentlemen, for the first."

The personage was evidently a good judge.

"Sir," said Sebastian Zorn, in the name of his companions, "we are much pleased by your compliments. If our second piece tortured your ears, it is——"

"Sir," replied the unknown, interrupting a phrase that might have been a long one. "I have never heard a thing played out of tune with so much precision. But I understand why you did it. It was to wake up the natives of Freschal, who have already gone to sleep again. Well, gentlemen, what you endeavoured to obtain from them by this desperate means permit me to offer you."

"Hospitality?" demanded Frascolin.

"Yes, hospitality. Unless I am mistaken I have before me the Quartette Party renowned throughout our superb America, which is never stingy in its enthusiasm."

"Sir," said Frascolin, "we are indeed flattered. And—this hospitality, where can we find it, thanks to you?"

"Two miles from here."

"In another village?"

"No, in a town."

"A town of importance?"

"Certainly."

"Allow me," observed Pinchinat. "We were told that there were no towns until we got to San Diego."

"It is a mistake—which I cannot explain."

"A mistake?" repeated Frascolin.

"Yes, gentlemen, and if you will accompany me I promise you a welcome such as artistes of your class are entitled to."

"I am of opinion that we should accept it," said Yvernès.

"And I share that opinion," said Pinchinat.

"One moment!" said Zorn, "do not go faster than the leader of the orchestra."

"Which means?" asked the American.

"That we are expected at San Diego," replied Frascolin.

"At San Diego," added the 'cellist, "where the city has engaged us for a series of musical matinées, the first of which is to take place on Sunday afternoon."

"Ah!" replied the personage, in a tone that betrayed extreme annoyance.

Then he continued :

"That does not matter. In a day you will have time to visit a city which is well worth the trouble, and I will see that you are taken to the nearest station, so that you can be at San Diego at the appointed time."

The offer was attractive and welcome. The quartette were assured of finding a good room in a good hotel—to say nothing of the attention promised by this obliging personage.

"Gentlemen, do you accept?"

"We accept," replied Zorn, whom hunger and fatigue disposed to welcome such an invitation.

"Agreed," replied the American. "We start at once. In twenty minutes we shall be there, and you will thank me, I am sure."

We need scarcely say that after the cheers provoked by the burlesque serenade the windows of the houses were shut. With its lights extinguished, the village of Freschal was again plunged in sleep.

The American and the four artistes went to the car, put down their instruments, and placed themselves behind them, while the American installed himself forward next to the engineer. A lever was touched, the electric accumulators worked, the vehicle trembled, and began to get up a rapid rate of speed, travelling westward.

A quarter of an hour afterwards an immense whitish light appeared, as if it were a dazzling diffusion of lunar rays. This was the town, the existence of which none of the Parisians had suspected.

The car stopped, and Frascolin said :

"Here we are on the shore."

"The shore—no," replied the American, "but a water-course we have to cross."

"And how?" asked Pinchinat.

"By means of this boat in which the car is carried."

It was one of the ferry-boats, so numerous in the United States, and on it the car was placed with its passengers.

Probably the ferry-boat was worked by electricity, for there was no steam, and in two minutes they were on the other side of the watercourse, alongside a quay. The car resumed its course along some country roads, and entered a park over which poured an intense light. The gate of the park gave access to a wide and long road paved with flags. Five minutes later the artistes descended at the steps of a comfortable hotel, where they were received with a welcome that augured well, thanks to a word from the American. They were immediately placed before a well-served table, and supped with good appetite, as may be believed.

The repast over, the major-domo led them to a spacious chamber lighted by incandescent lamps, to which shades were fitted, so as to shut out nearly all the light at will. Then, postponing to the morrow the explanation of all these marvels, they slept in the four beds placed in the four angles of the room, and snored with that extraordinary harmony which had given the Quartette Party its renown.

CHAPTER III

Next morning at seven o'clock, these words, or rather cries, resounded in the room after a startling imitation of a trumpet-call—something like the *réveillé*.

"Now, then! Whoop! On your feet; and in two-time!" vociferated Pinchinat.

Yvernès, the most careless of the four, would have preferred three-time, and even four-time, to disengage himself from the warm coverings of his bed. But he had to follow the example of his comrades, and leave the horizontal for the vertical.

"We have not a minute to lose—not one!"

"Yes," replied Zorn, "for to-morrow we must be at San Diego."

"Good," replied Yvernès; "half a day will suffice for us to visit the town of this amiable American."

"What astonishes me," added Frascolin, "is that there is an important city in the neighbourhood of Freschal. How could our driver have forgotten to tell us about it?"

"The point is that we should be here," said Pinchinat. "And here we are."

Through the large windows the light was pouring into the room, and the view extended for a mile down a superb road planted with trees.

The four friends proceeded to their toilette in a comfortable cabinet—a quick and easy task, for it was fitted with all the latest inventions, taps for hot water and cold water, basins emptying automatically, hot baths, hot irons, sprays of perfumes, ventilators, brushes moved mechanically, some for the head, some for the clothes, some for the boots, either to clean the dust off them or to black them. And then there were the buttons of the bells and telephones communicating with every part of the establishment. And not only could Sebastien Zorn and his companions obtain communication with every part of the hotel, but with different quarters of the town, and perhaps—such was Pinchinat's opinion—with every town in the United States of America.

"Or even in the two worlds," added Yvernès. But before they had an opportunity of trying the experiment a message was telephoned to them at forty-seven minutes past seven, as follows :

"Calistus Munbar presents his morning civilities to each of the honourable members of the Quartette Party, and begs them to descend as soon as they are ready to the dining-room of the Excelsior Hotel, where their first breakfast awaits them."

"Excelsior Hotel!" said Yvernès.

"Calistus Munbar, that is our obliging American," remarked Pinchinat.

"My friends," said the 'cellist, whose stomach was as imperious as its proprietor, "as breakfast is on the table, let us breakfast, and then——"

“And then take a run through the town,” added Frascolin.

“But what is this town?”

Our Parisians were dressed, or nearly so. Pinchinat replied that in less than five minutes they would do honour to the invitation of Mr. Calistus Munbar. And when their toilette was finished, they walked to a lift which deposited them in the large hall of the hotel, at the end of which was the door of the dining-room, an immense saloon gleaming with gilding.

“I am yours, gentlemen, always yours.”

It was the man of the night before who had just uttered this phrase of six words. He belonged to that type of personages who may be said to introduce themselves. It seems as though we had known them always.

Calistus Munbar was between fifty and sixty years of age, but he did not look more than forty-five. He was above the usual height, rather stout, his limbs long and strong, and every movement vigorous and healthy.

Zorn and his friends had many times met with people of this type, which is not rare in the United States. Calistus Munbar's head was enormous, round, with hair still fair and curly, shaking like leaves in a breeze; his features were highly coloured, his beard long, yellow, divided into points; moustache shaven; mouth, with the corners raised, smiling, satirical perhaps; teeth white as ivory; nose rather large at the end, with quivering nostrils, marked at the base of the forehead with two vertical folds supporting an eyeglass fastened to a thread of silver as fine and supple as a thread of silk. Behind the glasses gleamed an eye always in movement, with a greenish iris and a pupil glowing like fire.

The Yankee's physiognomy was in the highest degree expressive—the face of a man who suspected nobody, and could only see good in others. This was a man who could get out of difficulties, certainly, and he was also energetic. He laughed noisily.

Such was Calistus Munbar. He raised his big hat at the entrance of the Quartette Party. He shook hands with the four artistes. He led them to a table where the tea-urn was steaming and the traditional toast was smoking. He spoke all the time, giving them no opportunity to ask a single question—perhaps with the object of avoiding having to reply—boasting of the splendours of his town, the extraordinary creation of this city, keeping up the monologue without interruption, and when the breakfast was over, ending his monologue with these words :

“Come, gentlemen, and follow me. But one piece of advice.”

“What ? ” asked Frascolin.

“It is expressly forbidden to spit in the streets.”

“We are not accustomed to,” protested Yvernès.

“Good ! That will save you a fine.”

“Not spit—in America ! ” murmured Pinchinat, in a tone in which surprise was mingled with incredulity.

It would have been difficult to have obtained a guide more complete than Calistus Munbar. This town he knew thoroughly. There was not a hotel of which he did not know the owner's name, not a house that he did not know who lived there, not a man in the street by whom he was not saluted with familiarity.

The city was built on a regular plan. The avenues and roads, provided with verandahs above the footways, crossed each other at right-angles, forming a sort of chessboard. There was no want of variety about the houses ; in their style and interior arrangements they were according to no other rule than the fancy of their architects. Except along a few commercial streets, these houses had a look of the palace about them, with their courtyards flanked by elegant wings, the architectural arrangement of their front, the luxury of the furniture of their rooms, the gardens, not to say parks, in their rear. It was remarkable that the trees, of recent planting, no doubt, were none of them fully grown. So it was with the squares carpeted with lawns of a

freshness quite English, in which the clumps of trees of both temperate and torrid species had not drawn from the soil its full vegetative power. This peculiarity presented a striking contrast with the portion of Western America where forest giants abound in the vicinity of the great Californian cities.

The quartette walked in front of him, observing this part of the town, each according to his manner—Yvernès attracted by what did not attract Frascolin ; Zorn interested in what did not interest Pinchinat—all of them curious as to the mystery which enveloped this unknown city. From this diversity of views arose a fairly complete assemblage of remarks. But Calistus Munbar was there, and he had an answer for everything. An answer ? He did not wait to be asked ; he talked and talked, and never left off talking. His windmill of words turned and turned at the slightest wind.

Twenty minutes after leaving the Excelsior Hotel Calistus Munbar said :

“ Here we are in Third Avenue, and there are thirty in the town. This is the most business one, it is our Broadway, our Regent Street, our Boulevard des Italiens. In these stores and bazaars you find the superfluous and the necessary, all that can be asked for by the requirements of modern comfort.”

“ I see the shops,” observed Pinchinat, “ but I don’t see the customers.”

“ Perhaps it is too early in the morning ? ” added Yvernès.

“ It is due,” said Calistus Munbar, “ to most of the orders being given by telephone.”

At this point was Nineteenth Avenue, from which all trade was banished. Tram-lines ran down it as down the others, swift cars passed along without raising a grain of dust, for the roadway, laid with a rot-resisting pavement of Australian karry or jarrah, was as clean as if it had been polished. Frascolin, always observant, noticed that the footway under his feet sounded like a plate of metal.

"These are splendid workers in iron," he said, "they make their footways of sheet iron."

And he stepped up to Calistus Munbar to hear what he had to say.

"Gentlemen," said Munbar, "look at that mansion."

And he pointed to a vast construction of monumental aspect, the courtyard of which had along its front a railing of aluminium.

"This mansion—I might say this palace—is inhabited by the family of one of the principal notables of the town, that is Jem Tankerdon, the owner of inexhaustible mines of petroleum in Illinois, the richest, perhaps, and consequently the most honourable and most honoured, of our citizens."

"Millions?" asked Zorn.

"Phew!" said Calistus Munbar. "The million is for us but the current dollar, and here we count them by hundreds! Only the richest men are in this city. That explains why the shopkeepers make fortunes in a few years. I mean retail shopkeepers, for wholesale traders there are none."

"And manufacturers?" asked Pinchinat.

"There are no manufacturers."

"And shipowners?" asked Frascolin.

"There are none."

"People living on their investments?" asked Zorn.

"Only those and merchants on the way to be like them."

"What about the workmen?" observed Yvernès.

"When we want workmen we get them from somewhere else, and when their work is over we return them—with a good sum in wages."

"Look here, Mr. Munbar," said Frascolin, "you have a few poor in the town, just to keep the race from becoming extinct?"

"Poor! Mr. Second Violin! We have not got a single poor man in the town."

"Then begging is forbidden?"

"There is no necessity to forbid it, as the town is not

open to beggars. That is all very well for the cities of the Union, with their depôts, their asylums, their work-houses, and the houses of correction."

"Do you mean to say you have no prisons?"

"No more than we have prisoners."

"But criminals?"

"They remain in the old and new Continent, where they can exercise their calling under more advantageous conditions."

"Really, Mr. Munbar," said Sebastien Zorn; "one would think to listen to you that we were no longer in America."

"You were yesterday."

"Yesterday!" exclaimed Frascolin, wondering what could be the meaning of this strange expression.

"Doubtless. To-day you are in an independent city, over which the Union has no claim, which belongs only to itself."

"And its name?" asked Sebastien Zorn.

"Its name?" replied Calistus Munbar. "Allow me to be silent a little longer."

"And when shall we know?"

"When you have finished the visit by which it is so much honoured."

This reserve was at least peculiar. But it was of no consequence. Before noon the quartette would have finished their curious walk, and to learn the city's name as they were leaving it would be quite enough. The only puzzle about it was this: How could so considerable a city occupy one of the points of the Californian coast without belonging to the United States, and how was it that the driver of the carriage had never mentioned it?

"Gentlemen," said Munbar, "we are at the beginning of Thirty-Seventh Avenue. In this quarter there are no shops, no bazaars, none of that movement in the streets which denotes a business existence. Nothing but hotels and private houses, but the fortunes are inferior to those of

Nineteenth Avenue. Incomes of from ten to twelve millions."

"Mere beggars!" observed Pinchinat, with a significant grimace.

"Eh, Mr. Alto!" replied Calistus Munbar, "it is always possible to be a beggar in comparison with someone else! A millionaire is rich in comparison with a man who possesses only a hundred thousand, but not in comparison with him who has a hundred millions."

Many times already our artistes had noticed that of all the words used by their guide it was "million" which recurred most frequently. And a fascinating word it was, pronounced as he pronounced it.

The quartette continued their walk through the extraordinary town, the name of which was unknown to them. The people in the streets were all comfortably dressed; nowhere could the rags of a beggar be seen. Everywhere were trams, drays, trucks, moved by electricity. A few of the larger streets were provided with moving pavements, worked by an endless chain, and on which people walked as if on a travelling train, sharing in its own motion. Electric carriages rolled along the roads with the smoothness of a ball on a billiard-table. Equipages in the true sense of the word, that is to say, vehicles drawn by horses, were only met with in the wealthy quarters.

CHAPTER IV

At eleven o'clock, after so long a walk, it was permissible to be hungry. And our artistes took advantage of this permission; and they agreed that at any price they must have some luncheon. This was also the opinion of Calistus Munbar.

Should they return to the Excelsior Hotel? Yes, for there did not seem to be many restaurants in this town, where the people probably preferred to have their meals at home, and tourists were apparently rather rare.

In a few minutes a tramcar took the hungry men to their hotel, where they took their places before a well-served table. It afforded a striking contrast with the ordinary American style, in which the multiplicity of the dishes is not all in proportion to the quantity they contain. Excellent was the beef and mutton ; tender and tasty was the poultry ; of tempting freshness was the fish. And, instead of the iced waters of the restaurants of the Union, there were several kinds of beer and wines which the sun of France had distilled ten years before, on the hillsides of Médoc and Burgundy.

Pinchinat and Frascolin did honour to this repast, as did also Zorn and Yvernès. Calistus Munbar had invited them, and it would have been bad taste not to have accepted his hospitality.

Besides, this Yankee, whose conversational powers were inexhaustible, displayed quite a charming humour. He told them all about the town except the one thing his guests wished to know, namely, what was this independent city, the name of which he hesitated to reveal ? " A little patience," he would say ; " wait till the exploration is finished." Was his idea to make the quartette tipsy, with the object of letting them miss the train to San Diego ? No, but they drank well after having eaten well, and the dessert was being finished with tea, coffee, and liqueurs, when an explosion shook the glasses in the hotel.

" What is that ? " asked Yvernès, with a start.

" Do not be uneasy, gentlemen," replied Calistus Munbar, " that is the gun at the observatory."

" If it only means noon," said Frascolin, looking at his watch, " I beg to state that it is late."

" No, Mr. Alto, no ! The sun is no later here than elsewhere."

A singular smile played on the American's lips, his eyes sparkled behind his spectacles, and he rubbed his hands. He seemed to be congratulating himself on some excellent joke.

Frascolin, less excited than the others by the good cheer, looked at him suspiciously without knowing what to make of it.

"Come, my friends," added the American, in his most amiable manner, "allow me to remind you that there is the second part of the town for us to visit, and I shall die of despair if a single detail escapes you. We have no time to lose."

"At what time does the train start for San Diego?" asked Zorn, always anxious not to fail in his engagements by arriving late.

"Yes, at what time?" repeated Frascolin.

"Oh, in the evening," replied Calistus Munbar, with a wink of his left eye. "Come, my guests, come. You will not repent of having had me as a guide."

How could they disobey such an obliging personage? The four artistes left the Excelsior Hotel and strolled along the road. It really seemed as though they had drunk rather freely of the wine, for a kind of thrill seemed to run through their legs, although they had not taken their places on one of the moving footways.

Calistus Munbar took them down one of the roads leading to the second half of the town. In this district there was more animation than in the other. It was as though they had been suddenly transported from the northern to the southern states of the Union; from Chicago to New Orleans, from Illinois to Louisiana. The shops were better filled, the houses of more elegant architecture, the family mansions more comfortable, the hotels as magnificent, but of more cheerful aspect. The people were different in bearing and character. The city was apparently double, like certain stars, only the sections did not revolve round one another.

When they had nearly reached the centre of the district, the group stopped about the middle of Fifteenth Avenue, and Yvernès exclaimed:

"Upon my word, that is a palace!"

"The palace of the Coverley family," replied Calistus Munbar, "Nat Coverley, the equal of Jem Tankerdon."

"Richer than he is?" asked Pinchinat.

"Quite as rich," said the American. "An ex-banker of New Orleans, who has more hundreds of millions than he has fingers on both hands."

"A nice pair of gloves, Mr. Munbar!"

"Just so."

"And these two notables, Jem Tankerdon and Nat Coverley, are enemies, naturally?"

"Rivals, at least! Each striving for rule in the city's affairs, jealous of one another."

"Will they end by eating one another?" asked Zorn.

"Perhaps, and if one devours the other——"

"What an attack of indigestion will follow!"

And Calistus Munbar absolutely shook with laughter, so much was he amused at the reply.

In about two hours the quartette had arrived at the boundary of the town, which was marked by a superb iron railing, adorned with flowers and climbing plants. Beyond was the country, the circular line of which blended with the horizon of the sky.

And here Frascolin noticed something which he did not think it his duty to communicate to his comrades. What he noticed was that the sun, instead of being in the south-west at two o'clock, was in the south-east.

This was something to astonish a mind as reflective as that of Frascolin, and he had begun to rack his brains when Calistus Munbar changed the course of his ideas by exclaiming:

"Gentlemen, the tram starts in a few minutes. Let us be off to the harbour."

"The harbour?" asked Zorn.

"Yes, it is only about a mile—and that will enable you to admire our park."

The harbour, if it existed, ought to be a little below or a little above this town on the coast of Lower California.

In truth, where could it be if it were not on some point of the coast ?

The artistes, rather perplexed, sat down on the seats of an elegant car, in which were several other passengers, all of whom shook hands with Munbar, who seemed to know everybody, and then the dynamos of the tram began to drive them along. That which Munbar called a park was the country extending round the city. There were paths running out of sight, and verdant lawns, and painted barriers, straight and zigzagged, known as fences, around preserves, and clumps of trees—oaks, maples, ashes, chestnuts, nettle-trees, elms, cedars—all of them young, but the haunts of a world of birds of a thousand species. It was a regular English garden, with leaping fountains, baskets of flowers, then in all the abundance of spring, masses of shrubs of the most diversified species, giant geraniums like those of Monte Carlo, orange-trees, lemon-trees, olive-trees, oleanders, lentisks, aloes, camellias, dahlias, roses of Alexandria with their white flowers, hortensias, white and pink lotuses, South American passion-flowers, rich collections of fuchsias, salvias, begonias, hyacinths, tulips, crocuses, narcissi, anemones, Persian ranunculi, bearded irises, cyclamens, orchids, calceolarias, tree-ferns, and also species characteristic of the tropics, such as cannas, palms, date-trees, fig-trees, eucalypti, mimosas, banana-trees, guava-trees, calabash-trees, coconut-trees ; in a word, all that a connoisseur could ask for in the richest botanic garden.

Meanwhile the tramcar continued its somewhat leisurely journey through these enchanting gardens. To Zorn and his companions it seemed as though beyond the limits of this immense park were pieces of ground, methodically cultivated, displaying their different colours like the patterns of cloth formerly shown at tailors' doors. These were, no doubt, fields of vegetables, potatoes, cabbages, carrots, turnips, leeks, in fact, everything required for the composition of a perfect *pot-au-feu*. At the same time, they would have been glad to get out into the open country to discover

what this singular region produced in corn, oats, maize, barley, rye, buckwheat, and other cereals.

But here a factory appeared, its iron chimneys rising from its low, rough glass roofs. These chimneys, strengthened by iron stays, resembled those of a steamer under way, of a *Great Eastern* whose hundred thousand horses were driving her powerful screws, with this difference, that instead of black smoke they were only emitting mere threads which in no way injured the atmosphere.

This factory covered about ten thousand square yards. It was the first industrial establishment the quartette had seen since they had started on their excursion, under the American's guidance.

"And what is that establishment?" asked Pinchinat.

"It is a factory worked with petroleum," replied Munbar, looking as though his eyes would perforate his glasses.

"And what does this factory manufacture?"

"Electrical energy, which is distributed through the town, the park, the country, in producing motive force and light. At the same time, it keeps going our telegraphs, telephones, bells, cooking-stoves, machinery, arc lights, incandescent lights, aluminium moons, and submarine cables."

"Your submarine cables?" observed Frascaolin, sharply.

"Yes, those that connect the town with the different points of the American coast."

"And is it necessary to have a factory of such size for that purpose?"

"I think so, considering what we do with our electrical energy, and also our mental energy!" replied Munbar.

"Believe me, gentlemen, it required a pretty strong dose to found this incomparable city without a rival in the world!"

They could hear the dull rumbling of the huge factory, the vigorous belchings of the steam, the clanking of the machines, the thuds on the ground, bearing witness to a mechanical effort greater than in any modern industry. Who could have imagined that such power was necessary to move dynamos or charge accumulators?

The tram passed, and, a quarter of a mile farther on, stopped at the harbour.

The travellers alighted, and their guide, still profuse in his praises of everything, took them along the quays by the warehouses and docks. The harbour was oval in form, and large enough to hold some twenty ships. It was more of a wet dock than a harbour terminated by jetties ; two piers, supported on iron piles, and lighted by two lamps, facilitating the entry of vessels from the sea.

On that day the wet dock contained only half a dozen steamers, some destined for the transport of petroleum, others for the transport of the goods needed for daily consumption, and a few barques fitted with electrical apparatus employed in sea fishing.

Frascolin noticed that the entrance of the harbour faced the north, and concluded that it must be on the north shore of one of those points which jut out from Lower California into the Pacific. He also noticed that there was a current in the sea running eastward at an appreciable speed, as it ran against the pier-heads like the water along the side of a ship when under way—an effect due doubtless to the action of the rising tide, although the tide does not run very strong on the western coast of America.

“Where is the river we crossed yesterday in the ferry boat ? ” asked Frascolin.

“That is at the back of us,” the Yankee was content to reply.

But it would not do to delay if they wished to return to the town in time to take the evening train to San Diego.

Zorn mentioned this to Munbar, who answered :

“Never fear, my dear friends. We have plenty of time. A tram will take us back to the town after we have followed the shore a little. You wished to have a bird’s-eye view of the place, and in less than an hour you will get that from the top of the observatory.”

“You guarantee that ? ” said Zorn.

“I guarantee that at sunrise to-morrow you will no longer be where you are now.”

This reply had to be accepted ; although Frascolin's curiosity, which was much greater than that of his comrades, was excited to the utmost. He was impatient to find himself at the summit of this tower, from which the American affirmed that the view extended to a horizon of at least a hundred miles in circumference. After that, if he could not fix the geographical position of this extraordinary city, he would have to give up the problem for ever.

At the head of the dock was a second tram-line running along the coast. There was a train of cars, six in number, in which a number of passengers had already taken their seats. These cars were drawn by an electric locomotive, and their speed was from nine to twelve miles an hour.

Calistus Munbar invited the quartette to take their places in the tram, and it seemed as though it had only been waiting for our Parisians. The country appeared to differ very little from the park which lay between the town and the harbour. The same flat soil, and as carefully looked after. Green fields and meadows instead of lawns, that was all, fields of vegetables, not of cereals. At this moment artificial rain, projected from subterranean conduits, was falling in a beneficent shower on the long rectangles traced by line and square. The sky could not have distributed more mathematically or more opportunely.

The tram road skirted the coast, with the sea on one side, the fields on the other. The cars ran along in this way for about four miles. Then they stopped before a battery of twelve guns of heavy calibre, the entrance to which bore the inscription "Prow Battery."

The excursion had lasted long enough.

Calistus Munbar drew out his watch. "Thirteen minutes past four."

"You will not forget the ascent of the observatory?" Frascolin reminded him.

"Forget it, my dear, and I may say my old, friends ! I would sooner forget my own name, which enjoys a certain celebrity, I believe. In another four miles we shall be in

front of the magnificent edifice built at the end of First Avenue, that which divides the two sections of our town."

The tram started. Beyond were the fields, on which fell the afternoon rain, as the American called it; here again was the enclosed park, with its fences, its lawns, its beds, and its shrubberies.

Half-past four then chimed. Two hands indicated the hour on a gigantic dial, like that of the Houses of Parliament at Westminster, on the face of a tower.

At the foot of this tower were the buildings of the observatory, devoted to different duties, some of which, with round metal roofs and glass windows, allowed the astronomers to follow the circuit of the stars. They were arranged round a central court, from the midst of which rose the tower for a hundred and fifty feet. From its upper gallery the view around would extend over a radius of sixteen miles, if the horizon were not bounded by any high ground or mountains.

Calistus Munbar, preceding his guests, entered a door which was opened to him by a porter in superb livery. At the end of the hall the lift-cage was waiting, which was worked by electricity. The quartette took their places in it with their guide. The cage ascended slowly and quietly. Forty-five seconds after they stopped at the level of the upper platform of the tower. From this platform rose the staff of a gigantic flag, of which the bunting floated out in the northerly breeze.

Of what nationality was this flag? None of our Parisians could recognise it. It was like the American ensign, with its lateral stripes of white and red, but the upper canton, instead of the sixty-seven stars which twinkled in the Confederation at this epoch, bore only one, a star, or rather a sun of gold on a blue ground, which seemed to rival in brilliancy the star of day.

"Our flag, gentlemen," said Calistus Munbar, taking off his hat as a mark of respect.

Sebastien Zorn and his comrades could not do otherwise

than follow his example. Then they advanced to the parapet and looked over.

What a shriek—at first of surprise and then of anger—escaped them !

The country lay extended beneath them. The country was a perfect oval, surrounded by a horizon of sea, and as far as the eye could carry no land was in sight. And yet the night before, after leaving the village of Freschal in the American's company, Zorn, Frascolin, Yvernès, Pinchinat had travelled for two miles on the land. They had then crossed the river in the ferry-boat and again reached land. In fact, if they had left the Californian shore for any sea voyage they would certainly have noticed it.

Frascolin turned towards Calistus Munbar.

"We are on an island ?" he asked.

"As you see !" said the Yankee, with the most amiable of smiles.

"And what is this island ?"

"Floating Island."

"And this town ?"

"Milliard City."

CHAPTER V

Floating Island was an island worked by screws. Milliard City was its capital. Why this name ? Evidently because the capital was the town of the millionaires, a Gouldian, Vanderbiltian, Rothschildian city.

An artificial island ; there was nothing extraordinary in the idea. With a sufficient mass of materials submerged in a river, a lake, a sea, it was not beyond the power of men to make it. But that was not sufficient. Having regard to its destination, to the requirements it had to satisfy, it was necessary that this island could be moved from place to place, and consequently that it should float. There was the difficulty, which was not too great for iron-workers and engineers to overcome.

Already, at the end of the nineteenth century, with their instinct for the "big," their admiration for the "enormous," the Americans had conceived the project of forming a large raft some miles out at sea, and there mooring it with anchors. If this was not a city, it was at least a station in the Atlantic with restaurants, hotels, clubs, theatres, etc., where tourists could find all the conveniences of the watering-places then most in vogue. This project was realised and completed. And then, instead of making a stationary raft, they made a movable island.

Four years were occupied in the construction of this island, of which we may conveniently give the chief dimensions, the internal arrangements, the means of locomotion which enabled it to cruise amongst the most beautiful regions of the immense Pacific Ocean.

There are floating villages in China on the River Yangtse-Kiang, in Brazil on the Amazon, in Europe on the Danube. But these are only a few small houses built on the top of long rafts of wood. When it reaches its destination the raft is broken up, the houses taken off—the village had lived and died.

But it was quite another affair with regard to this island ; it was to be launched on the sea, it was to last as long as any of the works issued from the hands of man. And, besides, who knows if the earth will not some day be too small for its inhabitants. And will it not be necessary to build on the sea when the continents are overcrowded ?

Floating Island was an island in steel, and the strength of its hull had been calculated for the weight it had to bear. It was composed of 270,000 caissons (boxes or cases), each of them eighteen yards high, by ten long and ten wide. Their horizontal surface represented a square of ten yards on the side, that is to say, of a hundred square yards. When the caissons were all bolted and riveted together, they gave the island an area of about twenty-seven million square yards. In the oval form which the

constructors had given it, it measured about four and a half miles long and three broad, and its circuit in round numbers was about eleven miles.

Floating Island drew thirty feet of water, and had a freeboard of twenty feet. The subsoil of the new island was made safe from distortion and breakage by cross girders, riveting, and bolting.

It will be understood that there could be no question of launching the island as a ship is launched. It was built in sections, in compartments alongside one another on the waters of Madeleine Bay. This portion of the American coast became the station of the moving island, to which it could return when repairs were necessary.

The carcase of the island, its hull, if you will, was formed of two hundred and seventy thousand compartments, and filled in with vegetable soil, all except the site of the city, where the hull was of extraordinary strength. The depth of mould was ample for a vegetation restricted to lawns, flower-beds, shrubberies, clumps of trees and fields of vegetables. It had seemed impracticable to require this artificial soil to produce cereals and feed for cattle, which could be regularly imported. But the necessary arrangements had been made, so as not to be dependent on importation for milk and poultry.

The three-quarters of the soil of Floating Island devoted to vegetation amounted to about thirteen square miles, in which the park lawns afforded permanent verdure, and the carefully tilled fields abounded in vegetables and fruits, and the artificial prairies served as grazing ground for the flocks and herds. Electro-culture was largely employed, that is to say, the influence of continuous currents, the result being an extraordinary acceleration of growth and the production of vegetables of remarkable dimensions, such as radishes eighteen inches long and carrots weighing seven pounds apiece. The flower-gardens, vegetable-gardens, and orchards could hold their own with the best in Virginia or Louisiana. In this there was

nothing astonishing ; expense was no object in this island so justly called the " Pearl of the Pacific."

Its capital, Milliard City, occupied about a fifth of the seventeen square miles reserved for it, and was about six miles in circumference. Our readers who are willing to accompany Sebastien Zorn and his comrades on their excursion will soon know it well enough in every part. They will find it unlike the American towns which have the happiness and misfortune to be modern—happiness on account of the facilities for communication, misfortune on account of the artistic side, which is absolutely wanting. Milliard City, as we know, is oval in form, and divided into two sections divided by a central artery, First Avenue, which is about two miles long. The observatory is at one end, and the town hall at the other. Here are centralised all the public departments, the water supply and highways, the plantations and pleasure grounds, the municipal police, custom-house, markets, cemeteries, hospitals, schools, and science and art.

And now what was the population contained within this circuit of eleven miles ?

Well, Floating Island had but ten thousand, all of them natives of the United States.

It was enough, or rather more than enough, that they could not be mustered under the same banner with regard to religion. But it would have been difficult to reserve the exclusive right of residence on the island to the Yankees of the North, who were the port watch of Floating Island, or the Americans of the South, who formed its starboard watch. The interests of the Floating Island Company would not have admitted of this.

When the frame of the hull was finished, when the part reserved for the town was ready for building on, when the plan of the streets and avenues had been adopted, the buildings began to rise—superb hotels, less ornate mansions, houses destined for shops, public edifices, churches and temples, but none of those monstrosities of twenty-seven

floors, those "sky-scrapers" one sees at Chicago. The materials used were light and strong. The metal that prevailed was aluminium, seven times as light as iron, the metal of the future, and which is suitable for all the requirements of solid construction. This was used in conjunction with artificial stones, cubes of cement which can be worked with so much ease. Use was also made of glass bricks—hollow, blown, and moulded like bottles—set with mortar, transparent bricks with which if desired the ideal glass house could be realised. But it was really metal framework which was most employed, as in the different kinds of naval architecture. And what was Floating Island but an immense ship?

These various properties all belonged to the Floating Island Company. Those who lived in them were only tenants, whatever the amount of their fortune might be. Care had been taken to provide for all the requirements of comfort demanded by these extraordinarily rich Americans, by the side of whom the sovereigns of Europe and the nabobs of India cut but a sorry figure.

From the outset the financial side of the enterprise had been kept well in view. The hotels and houses had been let at fabulous prices. The rents amounted to millions, and many of the families could without inconvenience afford this payment for annual lodging. Hence, under this head alone the company secured a good revenue. Evidently the capital of Floating Island justified the name it bore.

Setting aside these opulent families, there were several hundreds paying a rental of from four to eight thousand a year. The surplus of the population comprised the professors, tradesmen, shopmen, and servants, and the foreigners, who were not very numerous, and were not allowed to settle in Milliard City or in the island. Lawyers were very few, and lawsuits consequently rare; doctors were fewer, and the death rate was consequently absurdly low. If you die on this Floating Island, regularly withdrawn

from intemperate climates and sheltered from every microbic influence, it was because you had to die after the springs of life had been worked to a centenarian old age.

Were there any soldiers in Floating Island ? Yes, a body of five hundred men under the orders of Colonel Stewart, for it had to be remembered that some parts of the Pacific are not always safe. In approaching certain groups of islands it is prudent to be prepared against any attack by pirates. That this militia was highly paid, that every man received a salary superior to that of a full general in old Europe, need not occasion surprise. The recruiting of these soldiers, lodged, boarded, and clothed at the expense of the administration, took place under excellent conditions, controlled by chiefs who were as rich as Cræsus ; the candidates were numerous enough to be embarrassing.

Were there any police on Floating Island ? Yes, a few companies, and they sufficed to keep the peace of a town which had no reason to be troubled. To reside there, permission was necessary from the municipal administration. The shores of the island were watched day and night by custom-house officers. You could only land at the ports. How could rascals get in there ? And as to those who went wrong on the island, they were arrested at once, sentenced, and put ashore in the west or east of the Pacific, on any corner of the old or new continent, without the possibility of ever returning to Floating Island.

We said the ports of Floating Island. Were there many of them, then ? There were two, situated at the extremity of the smaller diameter of the oval. One of these was called Starboard Harbour, the other Larboard Harbour. In this way there was no danger of regular communications being interrupted. If, owing to bad weather, one of these harbours was unavailable, the other was open to ships, which could thus reach the island in all winds. It was through these harbours that the island was supplied with goods, with petroleum brought by special steamers, with flour and

cereals, wines, beers, and other drinks, tea, coffee, cocoa, groceries, preserves, etc. At these were landed the cattle, sheep, and pigs from the best markets of America. Thus was assured a full supply of fresh meat and everything required by the most exacting gourmet. There were also landed the dress materials, linen, and fashions required by the most refined dandy or the most elegant lady. These things were bought from the tradesmen in the island at prices we dare not name, for fear of exciting the incredulity of the reader.

It may be asked how a regular service of steamers could be established between the American coast and an island which constantly changed its position—one day in one position, next day twenty miles away. The reply is very simple. Floating Island did not cruise about at a venture. Its position was in accordance with a programme drawn up by the administration, at the advice of the meteorologists of the observatory. It was a voyage—open to modifications however—across that part of the Pacific containing the most beautiful archipelagoes, avoiding as much as possible sudden bursts of cold or heat, which are the causes of so many lung affections. It was this which enabled Calistus Munbar to say, with regard to winter, “We know it not!” Floating Island only manœuvred between the thirty-fifth parallels of north and south latitude. Seventy degrees to traverse, over four thousand sea miles. What a magnificent field of navigation! Ships always knew where to find the Pearl of the Pacific, for its movements were arranged in advance among the various groups of these delightful islands, which form the oases in the desert of this mighty ocean.

How was enough fresh water procured for the wants of the island?

It was made by distillation in two special establishments, and was brought in pipes to the inhabitants of Milliard City, or led under the fields and country around. In this way it was provided for house and street service, and fell

in beneficent rain on the fields and lawns, which were thus independent of the caprices of the sky.

But we have still to describe how the island was moved. Great speed was unnecessary, as for six months it was not intended to leave the region comprised between the tropics and the hundred and thirtieth and hundred and eightieth meridians. From fifteen to twenty miles a day was all that Floating Island required. This speed it would have been possible to obtain by towage, by having a cable made of the Indian plant known as bastin, which is very strong and light, and would float just below the surface so as not to be damaged by shoals. This cable could be passed over pulleys at the extremities of the island, which could be towed backwards and forwards as barges are towed up and down certain rivers. And this cable would have had to be of enormous size for such a mass, and it would have been subject to many injuries. And the freedom would be that of an island in chains, obliged to follow a definite line ; and such freedom the citizens of free America revolted at.

At this period electricians had fortunately so far advanced that they could obtain almost anything from electricity. And it was to it they entrusted the locomotion of their island. Two establishments were enough to drive dynamos of enormous power, furnishing electrical energy by continuous current under a moderate voltage of two thousand volts. These dynamos drove a powerful system by screws, placed near the two ports. They each developed five millions of horse-power, by means of their hundreds of boilers, fed with petroleum briquettes, which are less cumbersome, less dirty than oil, and richer in caloric. These works were under the direction of the two chief engineers, assisted by a numerous staff of engineers and stokers under the supreme command of Commodore Ethel Simcoe. From his residence in the observatory, the commodore was in telephonic communication with the works. From him came the orders for advance or retreat, according to the programme. It was owing to him that, during

the night of the 25th, the order to start had been given just as Floating Island was in the vicinity of the Californian coast, at the commencement of its annual campaign.

The maximum speed to which the island could attain, when the engines were developing their ten million horse-power, was eight knots an hour. The most powerful waves, when raised by a storm, could have no influence on it. Its size rendered it unaffected by the undulations of the surge. Fear of sea-sickness there could be none. For the first few days just a slight thrill could be perceived, which the rotation of the screws communicated to its subsoil. Terminated by rams extending at each end for some sixty yards, dividing the waters without effort, it passed without shock or jolt over the immense liquid field open to its excursions.

The electrical energy produced at the works was employed for other purposes than the locomotion of Floating Island. It lighted the country, the park, and the city. It gave the luminant for the lighthouse, whose beams signalled from afar the presence of the island and prevented all chance of collision. It furnished the various currents required by the telegraphs and telephones used in the private houses and business establishments. It fed the artificial moons, of five thousand candle-power, which lighted an area of five hundred square yards.

This extraordinary construction was now on its second voyage across the Pacific. A month before it had left Madeleine Bay and coasted up to the thirty-fifth parallel, so as to be in the latitude of the Sandwich Islands. It was off the coast of Lower California when Calistus Munbar, learning by telephone that the Concert Quartette had left San Francisco, had started for San Diego to secure those eminent artistes. We know the way he effected this, how he brought them on to Floating Island, then moored a few cable lengths off the coast, and how thanks to this peculiarly smart proceeding, the dilettanti of Floating Island were to be charmed with chamber music.

Such was this new wonder of the world, this masterpiece

of human genius, worthy of the twentieth century, of which two violins, an alto, and a 'cello were the guests, and which was bearing them to the west across the Pacific.

CHAPTER VI

Even supposing that Sebastien Zorn, Frascolin, Yvernès, and Pinchinat were men who could be astonished at nothing, it would have been difficult for them to resist a legitimate outburst of anger, and a desire to spring at Calistus Munbar's throat. To have every reason to think that they were in North America, and yet to be really in mid-ocean ! To believe that they were within twenty miles of San Diego, where they were expected to give a concert next day, and to suddenly learn that they were moving away from it on an artificial island ! Really their anger was excusable.

Fortunately for himself, the American had taken care to get out of the way. Profiting by the surprise, or rather the amazement of the quartette, he had left the platform and gone down in the lift, where he was for the moment out of range of the recriminations and exuberances of the four Parisians.

" Rascal ! " exclaimed the 'cellist.

" Animal ! " exclaimed the alto.

" Suppose that, thanks to him, we are to see wonders ! " remarked the solo violin.

" Are you going to make excuses for him, then ? " asked the second violin.

" No excuses ! " said Pinchinat. " If there is a magistrate on Floating Island, we will have this Yankee hoaxer sent to prison."

" And if there is an executioner," said Zorn, " we will have him hanged."

But to obtain their different results it was first necessary to descend to the level of the inhabitants of Milliard City,

the police not acting at a hundred and fifty feet in the air. And that they would have done in a few moments, if descent had been possible. But the cage of the lift had not come up again, and there was nothing like a staircase. At the summit of this tower the quartette found themselves cut off from communication with the rest of humanity.

After their first outburst of vexation and anger, Sebastien Zorn, Pinchinat, and Frascolin left Yvernès to his admirations and remained silent, and finally motionless. Above them rose the flagstaff on which the flag floated.

Zorn experienced a furious desire to cut the halliards, and bring down the flag, as a ship lowers its colours. But, as this might lead to trouble, his comrades restrained him at the moment when his hand was brandishing a bowie-knife.

"Do not put us in the wrong," said the wise Frascolin.

"Then—you accept the situation?" asked Pinchinat.

"No, but do not complicate it."

"And our luggage on the road to San Diego!" remarked his Highness, crossing his arms.

"And our concert to-morrow!" exclaimed Zorn.

"We will give it by telephone," said the first violin. But the joke had anything but a soothing effect on the excited 'cellist.

The observatory, it will be remembered, occupied the middle of a vast square, on which abutted the First Avenue. At the other end of this principal artery, some two miles long, which separated the two sections of Milliard City, the artistes could perceive a sort of monumental palace, surmounted by a belfry of very light and elegant construction. They said to themselves that this must be the seat of government of the island, the residence of the municipality, supposing that Milliard City had a mayor and etceteras. They were not mistaken. And just then the clock in the belfry gave forth a joyous carillon, the notes of which reached the tower with the last undulations of the breeze.

"Listen!" said Yvernès. "That is in D major."

"And in two-four time," said Pinchinat.

The clock was striking five.

"And dinner," exclaimed Sebastien Zorn, "and bed ! Are we, owing to this miserable Munbar, to spend the night on this platform a hundred and fifty feet in the air ? "

It was to be feared so, if the lift did not afford the prisoners the means of quitting their prison.

In fact, the twilight is short in these low latitudes, and the sun falls like a projectile below the horizon. The four looked away to the furthest limits of the sky, over a deserted sea, without a sail, without even a trace of smoke. Across the country ran the trams away to the shore of the island, and between the two harbours. At this time the park was crowded. From the tower it looked like an immense basket of flowers—azaleas, clematis, jasmine, glyceras, passion-flowers, begonias, salvias, hyacinths, dahlias, camellias, roses of a hundred varieties. The people were crowding in, grown men and young folks, none of those little fops which are the shame of the great cities of Europe, but strong, well-built adults. Women and girls, most of them in pale straw-coloured dresses, the hue preferred in the torrid zone, leading little lap-dogs in silk coats with chains laced with gold. Here and there these people were following the sandy paths, capriciously winding among the lawns. Some were reclining on the cushions of electric cars, others were seated on benches sheltered by the trees. Farther off young gentlemen were playing tennis, and cricket, and golf, and also polo, mounted on spirited ponies. Groups of children—American children of astonishing exuberance, among whom originality is so precocious, particularly in the case of the girls—were playing on the grass.

The commercial quarters of the town were still busy at this time of day.

The moving footways still ran on with their burden of passengers down the principal streets. At the foot of the tower, in the square of the observatory, there was a passing crowd whose attention the four prisoners endeavoured to attract.

Pinchinat and Frascolin yelled again and again to them. They were heard, evidently, for arms were stretched out towards them, and even words reached their ears. But there was no sign of surprise. Nobody seemed astonished at the group on the tower.

The words that came aloft were "good-bye" and "how do you do," and "good-evening," and other formulas of polite greeting. It seemed as though the people had been informed of the arrival of the four Parisians on Floating Island.

"Ah!" said Pinchinat, "they are laughing at us."

"I think they are," remarked Yvernès.

An hour went by—an hour during which their appeals were in vain. The pressing invitations of Frascolin met with no more success than the furious invectives of Zorn. And the dinner-hour was approaching, the park was beginning to empty, the idlers in the streets were clearing off. It was maddening.

"Certainly," said Yvernès, "we resemble the people whom some evil genius attracted within a sacred enclosure, and who were condemned to perish for having seen what their eyes should not have seen."

"And we are to be left to the tortures of hunger," said Pinchinat.

"That shall not be until we have exhausted every means of prolonging our existence," said Zorn.

"If we have to eat each other, we will let Yvernès be number one!" said Pinchinat.

"When you please!" sighed the first violin in a subdued voice, bowing his head to receive the fatal blow.

At this moment a noise was heard in the depths of the tower. The cage of the lift came up and stopped at the platform. The prisoners, expecting to see Calistus Munbar, prepared to give him the welcome he deserved.

The cage was empty.

Be it so. There was plenty of time for that. The hoaxed would not fail to find the hoaxer. The thing to do at once

was to descend to his level, and the way to do that was to enter the cage.

That is what they did ; and, as soon as they were in, it began to descend, and in less than a minute they were at the ground level of the tower.

The door opened. The four went out. The interior court was deserted. They crossed it and took one of the paths along the square.

Did they attract much attention ? Yes and no. People looked at them, but not to any great extent—as though, perhaps, they were some of the few tourists occasionally visiting Milliard City. The quartette, under the influence of such extraordinary circumstances, did not feel very comfortable, and thought they were gazed at much more than they really were. On the other hand, it was not astonishing that the people appeared strange to them, these islanders of a moving island, these men voluntarily separated from their kind, wandering over the face of the largest ocean of the globe. With a little imagination they might fancy these Floating Islanders belonged to another planet of the solar system. This was the opinion of Yvernès, whose excitable brain was rather attracted by imaginary worlds. As to Pinchinat, he was content to say :

“ These people we are meeting have quite a millionaire look about them, and seem to be fitted with screws behind, like their island.”

But they got more and more hungry, and began to hurry towards the hotel. In the morning they would see about getting back to San Diego on one of the Floating Island steamers, after receiving an indemnity which Calistus Munbar would have to pay, as was only just.

But as they were going along First Avenue, Frascaolin stopped before a sumptuous edifice, on the front of which, in gold letters, was the inscription “ Casino.” To the right of the superb arcade which surmounted the principal door a restaurant was visible, and through the arabesqued glass could be seen a series of tables, of which some were

occupied by diners, while a numerous staff was busy about them.

"Here people eat!" said the second violin, consulting his famished comrades with a look.

Pinchinat's laconic reply was, "Let us go in."

And they entered the restaurant in single file. No particular notice seemed to be taken of their presence in this establishment, usually patronised by strangers. Five minutes afterwards they were attacking the first course of an excellent dinner, of which Pinchinat had chosen the bill of fare. Fortunately, the quartette's purse was well filled, and if it ran low on Floating Island it would soon be replenished by the takings at San Diego.

This bill of fare cheered up the Parisians. Their ideas took another turn. Perhaps they took a less gloomy view of the day's adventures.

In short, the quartette had become very well satisfied with themselves on the whole, when the time came to ask for their bill. It was handed to Frascolin by the superintendent in a black coat. The second violin cast his eyes on the total, rose from his seat, sat down again, rose again, rubbed his eyes, and looked at the ceiling.

"What is the matter with you?" asked Yvernès.

"A shudder from head to foot," replied Frascolin.

"Is it dear?"

"More than dear. We have to pay two hundred francs."

"The four?"

"No—each."

In fact, the amount was a hundred and sixty dollars. The game cost fifteen dollars, the fish twenty dollars, the rump-steaks twenty-five dollars, the Médoc and Burgundy thirty dollars a bottle, the rest at the same rate.

"Confound it!" exclaimed his Highness.

"The thieves!" exclaimed Sebastien Zorn.

These remarks, being in French, were not understood by the restaurant manager. Nevertheless this personage was quite aware of what was passing. But if a slight smile

appeared on his lips, it was a smile of surprise, not of disdain. It seemed to him quite natural that a dinner should cost a hundred and sixty dollars. That was the price in Floating Island.

"No scandal!" said Pinchinat. "France is looking at us. Let us pay."

"And no matter how," replied Frascolin. "On the road to San Diego, after to-morrow, we shall not have enough to buy a sandwich with!"

So saying, he took out his purse and extracted from it a respectable number of paper dollars, which, fortunately, were current at Milliard City, and he was about to hand them over when a voice was heard:

"These gentlemen have not to pay anything."

It was the voice of Calistus Munbar. The Yankee had just entered the room, expansive and smiling as usual.

"At last!" shouted Zorn, feeling inclined to take him by the throat and clutch him as he clutched the finger-board of his 'cello in the *forte* passages.

"Be calm, my dear Zorn," said the American. "Let us go into the room where coffee is waiting for us. There we can talk at our ease, and when our conversation is over——"

"I will strangle you!" replied Sebastian Zorn.

"No, you will kiss my hands."

"I shall not kiss you at all," said the 'cellist, by turns red and white with anger.

A minute afterwards, Calistus Munbar's guests were lounging on soft couches while he was balancing himself in a rocking-chair.

And this is what he said by way of introduction:

"Calistus Munbar, of New York, fifty years of age, great-grand-nephew of the celebrated Barnum, at the moment Superintendent of the Fine Arts of Floating Island, entrusted with all that concerns painting, sculpture, music, and the pleasures generally of Milliard City. And now that you know me, gentlemen——"

"Is it by chance," said Zorn, "that you are not also an

agent of the police, entrusted with the enticing of people into traps and keeping them prisoners, whether they like it or not ? ”

“ Do not be too hasty, irritable ’cellist,” replied the American, “ and wait for the end.”

“ We will wait,” said Frascolin, gravely, “ and we are listening.”

“ Gentlemen,” continued Calistus Munbar, graciously, “ all I wish to touch on in this interview is the question of music as it exists in our island. Lyrical theatres, Milliard City does not as yet possess any, but if you wish it, they will rise from the soil as by enchantment. Up to the present our fellow-citizens have satisfied their musical tendencies by keeping themselves acquainted with the masterpieces of lyric art by means of the most approved apparatus. The ancient and modern masters, the great artistes of the day, the most sought-after of instrumentalists, have been heard by us by means of the phonograph——”

“ A mere bird-organ, your phonograph ! ” exclaimed Yvernès, disdainfully.

“ Not quite so much as you may think,” said the superintendent. “ We are the possessors of instruments which have enabled us to listen to you when you were at Boston or Philadelphia ; and, if you please, you can applaud yourself with your own hands.”

“ All that is very well, but your Milliard City, I see, has only heard music in a box, melodic preserves sent to it like tinned sardines or salt beef.”

“ Pardon me, Mr. Alto.”

“ I will pardon you, but I insist on this point, that your phonographs only preserve the past, and that you have probably never heard an artiste in Milliard City when he is playing.”

“ You must pardon me once more.”

“ Our friend, Pinchinat, will pardon you as much as you like, Mr. Munbar,” said Frascolin. “ His pockets are full of pardons, but his remark is just. Still, if you could

put yourselves in communication with the theatres of America or Europe——”

“And do you think that would be impossible, my dear Frascolin ?” exclaimed the superintendent, stopping in his see-saw.

“What do you mean ?”

“I say that it is only a question of price, and our city is rich enough to satisfy all its fancies, all its aspirations as regards lyric art, and it has done so.”

“And how ?”

“By means of the theatrophones installed in the concert room of this casino. The company possesses a number of submarine cables immersed in the waters of the Pacific, one end of which is at Madeleine Bay, and the other held in suspension by powerful buoys. When our fellow-citizens wish to hear one of the singers of the Old or New World, we fix on to one of these cables, and send a telephonic order to our agents at Madeleine Bay. These agents put us in communication with America or with Europe. The cables are connected with such and such a theatre, such and such a concert-room, and we, seated in this casino, really assist at these distant performances and applaud.”

“But the people over there cannot hear their applause !” exclaimed Yvernès.

“I beg your pardon, they do—by return wire !

“The Floating Island Company thought that the time had come to replace their phonographs and theatrophones by living artistes in flesh and blood, and give the inhabitants of Milliard City the inexpressible pleasure of a direct execution of the masterpieces of art. It wished to begin with chamber music before organising operatic orchestras. It thought of you. It gave me instructions to secure you at any price, to carry you off if need be. You are the first artistes that have had access to Floating Island, and I leave you to imagine the welcome that awaits you !”

Yvernès and Pinchinat were much affected by these enthusiastic periods of the superintendent. That it might

be a hoax did not occur to them. Frascolin, a man of reflection, asked himself if he were to take this adventure seriously. After all, in such an extraordinary island would not things appear under an extraordinary aspect? As to Sebastien Zorn, he had resolved not to give in.

"No, sir," he said, "men are not to be carried off without their consent! We will begin an action against you."

"An action! When you ought to overwhelm me with thanks, ungrateful that you are!" replied the superintendent.

"And we will obtain damages, sir."

"Damages! When I offer you a hundred times more than you could hope to get."

"How much?" said the practical Frascolin.

Calistus Munbar took out his pocket-book and produced a sheet of paper bearing the arms of Floating Island. Presenting it to the four artistes, he said:

"Your four signatures at the end of this agreement, and the matter is done."

"Sign it before we have read it?" said the second violin.

"That will never do."

"You will never have cause to regret it," said Calistus Munbar, indulging in an outburst of hilarity that shook his whole body. "But let us proceed in proper form. It is an engagement which the company proposes to you, an engagement for twelve months from this date, for the execution of chamber music such as you have been giving in your programmes in America. In twelve months Floating Island will have returned to Madeleine Bay, where you will arrive in time——"

"For our concert at San Diego, I suppose?" exclaimed Sebastien Zorn, "San Diego, where we shall be greeted with hisses."

"No gentlemen, with cheers. Artistes such as you the dilettanti are always too honoured and too happy to hear even if a year behind time."

How could they be angry with such a man?

Frascolin took the paper and read it attentively.

"What guarantee have we?"

"The guarantee of the Floating Island Company, under the signature of Mr. Cyrus Bikerstaff, our governor."

"And the terms are these I see set forth in this agreement?"

"Exactly. One million francs——"

"For the four?" asked Pinchinat.

"For each," said Calistus Munbar, with a smile, "and yet that amount is not in accordance with your merit, which no one can reward at its proper value."

It would, it must be admitted, have been difficult to have been more pleasant. And yet Sebastien Zorn protested. He would not accept at any price. He would go to San Deigo, and it was not without difficulty that Frascolin succeeded in calming his indignation.

Yet there could not help being some mistrust regarding the superintendent's proposition. An engagement for a year at the rate of a million francs apiece, could it be serious? Quite serious, as Frascolin discovered when he asked:

"When is the money payable?"

"Quarterly," replied the superintendent, "and here is the first payment in advance."

Of the roll of notes which bulged his pocket-book Calistus Munbar made four bundles of fifty thousand dollars, that is two hundred and fifty thousand francs, which he handed to Frascolin and his comrades.

That is the way to manage matters in American fashion.

Sebastien Zorn could not help being shaken. But his ill-humour never lost its rights, and he could not help remarking:

"After all, at the prices that prevail in your island, if you pay twenty-five francs for a partridge, you probably pay a hundred francs for a pair of gloves, and five hundred francs for a pair of boots?"

"Oh, Monsieur Zorn," exclaimed Calistus Munbar,

“ the company does not stand at such trifles, and it desires that the Quartette Party will have all their expenses paid for them during their sojourn on the island.”

To these generous offers what other response could there be but to sign the engagement ?

This was what Frascaolin, Pinchinat, and Yvernès did. Zorn muttered that it was all absurd. To embark on a floating island was ridiculous. They would see how it would end. At last he decided to sign.

And this formality accomplished, if Frascaolin, Pinchinat and Yvernès did not kiss Calistus Munbar’s hand, they at least shook it warmly. Four shakes of the hand at a million each !

And that is how the Quartette Party were launched on this extraordinary adventure, and it was under such circumstances that its members became the guests of Floating Island.

CHAPTER VII

Floating Island glided gently over the waters of this Pacific Ocean, which justifies its name at this season of the year. Accustomed for twenty-four hours now to this tranquil motion, Sebastien Zorn and his comrades no longer noticed that they were being carried over the sea. So powerful were its hundreds of screws, driven by their ten million horse-power, that the thrill of the steel hull was barely perceptible. There was no sign of the oscillations of the waves, to which even the most powerful iron-clads have to yield. In the houses there were no rolling tables or swing lamps. Why should there be ? The houses of Paris, London, and New York were not more securely fixed on their foundations.

After a few weeks’ stay at Madeleine Bay, the assembly of notables of Floating Island, called together by the president of the administrative council of the company, had determined on the programme of their annual tour.

The island would visit the chief archipelagoes of the Eastern Pacific, voyaging through that hygienic atmosphere, so rich in ozone, in condensed electrified oxygen, gifted with active peculiarities not possessed by oxygen in its ordinary state. As the apparatus was free to move anywhere, advantage was taken of this power to go either east or west, to the American or Asiatic shore, as might be desired. Floating Island went where it pleased, so as to experience the distractions of a varied voyage. And even if it were desired to abandon the Pacific for the Indian Ocean or the Atlantic, to round Cape Horn or the Cape of Good Hope, it could proceed in the direction wished for, and rest assured that neither currents nor tempests would prevent its attaining its object.

But there was no question of its visiting these distant seas, in which it would not find what the Pacific offers among its innumerable archipelagoes. That ocean was a theatre quite large enough for its many voyages. Floating Island could move about from one archipelago to another. If it was not endowed with that special direction instinct of animals—that sixth sense of orientation which guides them where their wants call them—it was directed in safety according to a programme discussed at length and unanimously approved. Up to then there had never been any disagreement between the Starboardites and Larboardites. And the present intention was a westerly voyage to the Sandwich Islands. The distance of about twelve hundred leagues which separates this group from the place where the quartette came on board would take about a month to accomplish at moderate speed, and Floating Island could remain in the archipelago until it was found convenient to start again for another group in the southern hemisphere.

On the morrow of this memorable day the quartette left the Excelsior Hotel and took up their quarters in some rooms in the casino which were put at their disposal—a comfortable suite, richly furnished, as may be supposed.

First Avenue lay displayed in front of its windows. Sebastien Zorn, Frascolin, Pinchinat, Yvernès, had each his own room communicating with a sitting room common to all. The central court of the establishment yielded them the shade of its trees in full foliage, and the freshness of its fountains. On one side of this court was the museum of Milliard City ; on the other the concert-room where the Parisian artistes were so happily to replace the echoes of the phonographs and the transmissions of the theatrophones. Twice a day, three times a day, as many times a day as they wished, their table was laid in the restaurant, where the manager favoured them with no more of his remarkable efforts in addition.

This morning, when they had all met in the sitting-room before descending for breakfast :

“ Well ! ” said Pinchinat, “ what do you say to what has happened to us ? ”

“ A dream,” replied Yvernès, “ a dream in which we are engaged at a million a year.”

“ It is unmistakable reality,” replied Frascolin. “ Search in your pockets, and you can pull out the first quarter of the said million.”

“ It remains to see how it is going to end ! Very badly, I imagine,” said Zorn, bent on discovering a folded rose-leaf in the bed on which he had been laid in spite of himself. “ Besides, where is our luggage ? ”

In fact, the luggage was probably at San Diego, to which they could not go in search of it. Oh ! Very rudimentary luggage ; a few portmanteaux, linen, toilet utensils, a change of clothes, and also, it is true, the costume of the executants when they appeared before the public.

There was nothing to be uneasy about on this point. In forty-eight hours this rather faded wardrobe would be replaced by another presented to the four artistes without their having to pay fifteen hundred francs for a coat or five hundred francs for a pair of boots.

Besides, Calistus Munbar, enchanted at having so ably

conducted this delicate affair, took care that the quartette had nothing to wish for. It was impossible to imagine a more obliging superintendent. He occupied a suite of rooms in the casino of which he had the chief management, and the company had taken care that the fittings and appointments were worthy of his magnificence. We would rather not say how much they cost.

In this casino, where the dilettanti came to listen to the music from afar, to which the concerts of the quartette were now to be added, there were also the public collections of Milliard City. To the lovers of paintings, the gallery, rich in ancient and modern pictures, offered a number of masterpieces bought at extravagant prices, canvases of the Italian, Dutch, German, and French schools which would make envious the collections of Paris, London, Munich, Rome, and Florence. The museum also possessed statues of real value, marbles of the great sculptors ancient and modern, placed in the courts of the casino. Thanks to this climate being without rain or fog, groups, statues and busts could resist the attacks of the weather without injury.

The most frequented rooms in the casino were the reading-rooms devoted to the newspapers, and the European and American reviews brought by the regular service of steamers to Floating Island from Madeleine Bay. After being turned over, read and re-read, these reviews were placed on the shelves of the library with many thousand other works, the classification of which required the presence of a librarian at a salary of twenty-five thousand dollars, who had probably less to do than any of the other functionaries of the island. This library also contained a number of phonographic books which gave no trouble to read ; all you had to do was to press a button and you heard the voice of some excellent reader aloud.

For foreign intelligence the papers were indebted to the daily telephonic communication with Madeleine Bay, whence started the cables submerged in the depths of the

Pacific. The people of Milliard City were thus informed of all that passed all over the world, if there were sufficient interest in it.

On the 11th of June, a fortnight after their arrival, the quartette gave their first concert, the announcement, in electric letters, being exhibited along the larger avenues. It need hardly be said that the instrumentalists had been previously presented to the Governor and the municipal council. Cyrus Bikerstaff had given them a most cordial welcome. The newspapers had referred to the success of the tours of the Quartette Party in the United States of America, and warmly congratulated the superintendent on having secured their services—in rather an arbitrary manner, as we know. What pleasure there would be in seeing as well as hearing these artistes executing the works of the masters ! What a treat for connoisseurs !

Although the four Parisians had been engaged for the casino at Milliard City at fabulous expense, do not let it be supposed that the concerts were to be free to the public. Far from that. The administration intended to make a large profit out of the affair, like the American impresarios whose singers cost them a dollar a bar, and even a dollar a note. It was customary to pay for the theatrophonic and phonographic concerts at the casino, and now the people must pay considerably more. The seats were all at the same price, two hundred dollars each—that is a thousand francs in French money—and the superintendent flattered himself that the room would be full.

He was not deceived. Every seat was taken. The comfortable and elegant room of the casino could only contain a hundred, it is true ; and if the seats had been put up to auction, there is no knowing what amount the receipts would have reached. But that would have been contrary to the usages of Floating Island. Everything with a market value appeared in the price lists, the superfluous as well as the necessary. Without this precaution, owing to the enormous fortunes of some of the inhabitants, the whole

supply might be bought up by one man, and this it was desirable to avoid. The rich Starboardites might, it is true, go to the concert for the love of the art, while the rich Larboardites might possibly go there because it was the fashion.

When Sebastien Zorn, Pinchinat, Yvernès, and Frascaolin appeared before the spectators of New York, Chicago, Philadelphia, and Baltimore, it was no exaggeration on their part to say, "There is an audience worth millions." This evening they would have been within the truth in saying that their audience was worth hundreds of millions. Only think of it ! Jem Tankerdon, Nat Coverley, and their families were conspicuous in the front row of seats. In other parts of the room were a number of amateurs, who, though only minor millionaires, were none the less "a heavy bag," as Pinchinat very justly remarked.

"Now then !" said the chief of the quartette when the time came for them to appear on the platform.

And they took their places, not more excited than usual, nor even so much as if they were appearing before a Parisian public, which might have less money in their pockets but more of the artistic sense in their minds.

It is necessary to say that they had not yet taken lessons of their countryman, the professor of deportment. Sebastien Zorn, Yvernès, Frascaolin, and Pinchinat were perfect as to their attire—white cravat at twenty-five francs, pearl-grey gloves at fifty francs, shirt at seventy francs, boots at a hundred and eighty francs, waistcoat at two hundred francs, black trousers at five hundred francs—all at the expense of the administration, be it understood. They were welcomed with applause or very warmly by the Starboardite hands, more discreetly by the Larboardite hands—a matter of temperament.

The programme of the concert comprised four items which they had obtained from the casino library, which was well supplied with works by the superintendent's care :

First quartette in E flat ; Op. 16, Mendelssohn.

Second quartette in F major ; Op. 16, Hadyn.

Tenth quartette in E flat ; Op. 74, Beethoven.

Fifth quartette in A major ; Op. 10, Mozart.

The executants played marvellously in this millionised room of the floating island, on the surface of an abyss more than five thousand metres deep in this portion of the Pacific. They obtained a success that was considerable and deserved, more especially among the dilettanti of the Starboardite section. You should have seen the superintendent during this memorable evening. He exulted. It looked as though it was he who had just been playing on both violins, the alto, and the 'cello. What a fortunate first appearance for the champions of chamber music—and for their impresario !

It should be stated that if the room was full, the vicinity of the casino was crowded. What a number there were who had not been able to obtain a bracket-seat or a stall, to say nothing of those whom the high prices kept away. This outside audience heard the music from afar, as if it came from the box of a phonograph or the mouth of a telephone. But their applause was none the less hearty.

And they applauded uproariously when the concert ended and Sebastien Zorn, Yvernès, Frascolin, and Pinchinat appeared on the terrace of the left-hand pavilion.

First Avenue was inundated with luminous rays. From the heights of space, the electric moons shed rays of which the pale Selene might well be jealous.

In front of the casino, on the footpath, a little apart from the others, a couple attracted the attention of Yvernès. A man was there, with a woman on his arm. The man was above the middle height, of distinguished physiognomy, severe, sad even, and perhaps fifty years old. The woman was a few years younger, tall, proud-looking, with grey hair peeping from under her hat.

Yvernès, struck with their reserved attitude, pointed them out to Calistus Munbar.

"Who are those people?" he asked.

"Those people?" replied the superintendent, with a disdainful pout. "Oh, they are raving melomaniacs."

"And why did they not have a seat in the casino room?"

"Probably because it cost too much."

"Their fortune?"

"Hardly two hundred thousand francs a year."

"Pooh!" said Pinchinat. "And who are these poor beggars?"

"The King and Queen of Malecarlie."

CHAPTER VIII

There exists in this portion of the Pacific a submarine mountain range extending from the west-north-west to the east-south-east for nine hundred leagues, if the abysses of two thousand fathoms which separate it from the other ocean lands were emptied away. Of this chain but seven summits appear above the waters. These seven islands, of unequal size, constitute the Hawaiian archipelago, otherwise known as the Sandwich Islands.

Leaving Sebastian Zorn to grumble in his corner, and shut himself up in his complete indifference to all natural curiosities as if he were a violoncello in its box, Pinchinat, Yvernès, and Frascolin reasoned in this way, and they were not wrong in doing so.

"I shall not be sorry to visit these Sandwich Islands! If we have to cruise about the Pacific, we may as well have a few souvenirs to take away with us."

"The natives will be a change to us after the Pawnes, Sioux, and other too civilised Indians of the Far West, and I shall not be sorry to meet a few real savages—cannibals."

"Are they cannibals still?"

"Let us hope so," replied Pinchinat. "Their grandfathers ate Captain Cook, and if the grandfathers enjoyed the illustrious navigator, it is not likely that the grandchildren have lost the taste for human flesh!"

It must be confessed that his Highness spoke rather irreverently of the celebrated English sailor who discovered this archipelago in 1778.

The result of this conversation was that our artistes hoped that the chances of the voyage would bring them into the presence of natives more authentic than the specimens exhibited in the Jardin d'Acclimatation, and in any case in their native country, instead of that of their production. They experienced a certain impatience to get there, expecting every day that the look-outs at the observatory would signal the first heights of the Hawaiian Group.

This they did in the morning of the 6th of July. The news immediately spread, and the placard at the casino bore this notice, "Sandwich Islands now in sight."

It is true that the islands were still fifty leagues away; but the highest summits of the group, those of the island of Hawaii, are over 4,200 metres high, and in fine weather are visible at this distance.

Coming from the north-east, Commodore Ethel Simcoe steered for Oahu, having for its capital Honolulu, which is also the capital of the archipelago. This island is the third of the group in latitude, Nuhau, which is a vast cattle park, and Kauai being both to the north-west of it. Oahu is not the largest of the Sandwich Islands; it measures only 1,680 square kilometres, while Hawaii has an area of nearly 17,000. As to the other islands, their area is more than 3,812 altogether.

As a matter of course, our Parisian artistes had formed agreeable acquaintanceships with the chief functionaries of Floating Island. All of them, as well as the Governor, the Commodore, Colonel Stewart, and Engineers Somwah and Watson had done their best to make them welcome. They frequently visited the observatory, and remained

for hours on the platform of the tower. One need not be astonished therefore that on this occasion Yvernès and Pinchinat, the most enterprising of the quartette, had come here, and that about ten o'clock in the morning the lift hoisted them to the masthead, as his Highness called it.

Commodore Ethel Simcoe was there already, and, lending the two friends his telescope, told them to observe a point on the horizon to the south-west among the lower mists of the sky.

"That is Mauna Loa of Hawaii," said he; "or it is Mauna Kea, two superb volcanoes which in 1852 and 1855 precipitated on to the island a flood of lava covering seven hundred square metres, and whose craters in 1880 hurled forth seven hundred million cubic metres of eruptive substances."

"Famous!" replied Yvernès. "Do you think, Commodore, that we shall have the good luck to see such a spectacle?"

"I do not know, Monsieur Yvernès," replied Ethel Simcoe. "Volcanoes do not erupt to order."

"Oh, on this occasion only, and under distinguished patronage!" added Pinchinat. "If I were rich like Messrs. Tankerdon and Coverley, I would pay for eruptions when I liked."

"Well, we will talk to them about it," said the Commodore, smiling, "and I have no doubt they will do even the impossible to make themselves agreeable to you."

Thereupon Pinchinat asked what was the population of the Sandwich Islands. The Commodore told him that it had been two hundred thousand at the beginning of the century, and was then reduced to about half.

"Good, Mr. Simcoe, a hundred thousand savages, that is quite enough, and if only they have remained cannibals, and lost nothing of their appetite, they will make only a mouthful of all the Milliardites of Floating Island."

It was not the first time that the island had visited this archipelago. The preceding year it had been in these waters attracted by the salubrity of the climate. And in

fact invalids went there from America, sent by the doctors, as the doctors send Europeans to breathe the humid air of the Pacific ! Why not ? Honolulu is not more than twenty-five days from Paris, and there you can impregnate your lungs with an oxygen you can get nowhere else.

Floating Island arrived within sight of the group in the morning of the 9th of July. The island of Oahu lay about five miles off to the south-west. Above, pointing to the east, was Diamond Head, an ancient volcano dominating the roadstead behind, and another cone called the Punch Bowl by the English. As the Commodore observed, if this enormous cup were filled with brandy or gin, John Bull could have no difficulty in emptying it.

They passed between Oahu and Molokai. Floating Island, like a ship under the action of its rudder, was steered by its starboard and larboard screws. The floating island stopped after rounding the south-east cape of Oahu, at ten cable's lengths from the shore, its draught of water being considerable. As it was necessary for the purpose of keeping a clear berth to remain at some distance from the land, it did not moor in the strict sense of the word, that is to say, it did not use anchors, which would have been impossible, owing to the depth of a hundred metres and more. By means of the engines, which were kept working during the stay, it lay as motionless as the eight principal islands of the Hawaiian Archipelago. The quartette contemplated the heights which developed before their eyes. In the distance they could see nothing but masses of trees—clumps of orange-trees, and other magnificent specimens of the temperate flora. To the west, through a narrow break in the reef, appeared a little lake, the Lake of Pearls, a sort of lacustrine plain pierced with ancient craters.

The aspect of Oahu was smiling enough, and the cannibals desired by Pinchinat had nothing to complain of the theatre of their exploits. If they still abandoned themselves to their cannibalistic instincts, his Highness could wish for nothing more.

But this is what he suddenly exclaimed :

“ Great heaven ! what is it I see ? ”

“ What do you see ? ” asked Frascaolin.

“ There. Steeples——”

“ Yes—and towers—and palace façades ! ” said Yvernès.

“ It cannot be possible that they ate Captain Cook there ! ”

“ We are not at the Sandwiches ! ” said Sebastien Zorn, shrugging his shoulders. “ The Commodore has made a mistake as to the route.”

“ Assuredly,” replied Pinchinat. No ! Commodore Simcoe had not gone astray. It was really Oahu, and the town extending over many square kilometres was Honolulu.

Evidently the quartette was mistaken. What changes there had been since the great English navigator discovered this group ! Missionaries had excelled each other in devotion and zeal. Not only had the original language disappeared before the Anglo-Saxon tongue, but the archipelago contained Americans, Chinese—but for the most part employed by the owners of the soil, from whom had arisen a race of semi-Chinese, the Hapa-Paké—and even Portuguese, owing to the line of vessels between the Sandwich Islands and the Azores. Aborigines were still to be found, however, and enough of them to satisfy our four artistes, although these natives had been decimated by leprosy, a malady of Chinese importation. But they were hardly of the type of eaters of human flesh.

“ Our local colour ! ” exclaimed the first violin, “ what hand has wiped thee from the modern palette ? ”

Yes ! Time, civilisation, progress, which is a law of nature, had almost effaced this colour ; and this had to be recognised, not without regret, when one of the electric launches of Floating Island passed the long line of reefs and put Sebastien Zorn and his comrades ashore.

Between two lines of piles meeting at an acute angle opened the harbour, sheltered from the dangerous winds by an amphitheatre of mountains. Since 1794 the reefs

which protect it from the ocean waves had risen more than a yard in height.

Nevertheless, there was sufficient water for vessels drawing from eighteen to twenty feet of water to come alongside the quays.

"What a deception!" murmured Pinchinat. "It is really deplorable that we should have to get rid of so many illusions when we travel."

"And we would do much better to stay at home," retorted the 'cellist.

"No!" exclaimed Yvernès, always enthusiastic. "What spectacle can be compared to that of this artificial island coming to visit the oceanic archipelagoes?"

Nevertheless, if the moral condition of the Sandwich Islanders had regrettably changed to the lively displeasure of our artistes, it was not the same with the climate. It is one of the most salubrious in these parts of the Pacific, notwithstanding that the group is in a region known as the Hot Sea. If the thermometer does not stand at a high level when the north-east trade winds are not in force, if the northern trade causes violent storms known as kouas, the mean temperature of Honolulu does not exceed twenty-one degrees centigrade. It would be bad taste to complain of this on the borders of the torrid zone; and the inhabitants did not complain of it, and, as we have indicated, American invalids crowded into the archipelago.

But the more the quartette penetrated into the secrets of this archipelago, the more their illusions fell, fell like the leaves at the end of autumn. They pretended to have been mystified when they should have accused themselves of inviting this mystification.

"It is this Calistus Munbar who has again taken a rise out of us," said Pinchinat, remembering what the superintendent had told them as to the Sandwich Islands being the last rampart of native savagery in the Pacific. And when they bitterly reproached him:

"What would you have, my dear friends?" he replied,

with a wink of his right eye. "The place has changed so since my last voyage that I no longer recognise it."

"Joker!" retorted Pinchinat, amusing himself with a dig in the superintendent's stomach.

There could be no doubt that, if changes had taken place, they must have occurred with extraordinary rapidity. The Sandwich Islands had rejoiced in a constitutional monarchy, founded in 1837, with two chambers, that of the nobles and that of the deputies. The first was nominated by the proprietors of the land, the second elected by all the people who knew how to read and write—the nobles for six years, the deputies for two years.

Each chamber was composed of twenty-four members, who held their deliberations together in the presence of the royal ministry, formed of four of the king's councillors.

"And then," said Yvernès, "they had a king, a constitutional king, instead of a monkey in feathers, and to whom foreigners could offer their humble respects."

"I am sure," affirmed Pinchinat, "that his Majesty did not even wear rings in his nose, and that he was provided with false teeth by the best dentists in the New World."

"Ah! civilisation, civilisation!" repeated the first violin. "These Kanakas had no need of false teeth when they ate their prisoners of war."

Floating Island was prepared for a stay of ten days, and a number of its inhabitants took advantage of this to explore Honolulu and its environs. The Coverley and Tankerdon families, the chief notables of Milliard City, went ashore daily. On the other hand, although it was the second appearance of the island in these parts of Hawaii, the admiration of the Hawaiians was boundless, and they came in crowds to visit this marvel. It is true that the policy of Cyrus Bikerstaff made the admission of strangers difficult, and required that when evening came the visitors returned at the stated hour. Owing to these measures of security it would have been anything but pleasant for an intruder to remain on the Pearl of the Pacific without a

permit, which was not easily obtained. There were thus nothing but good relations on both sides, but there were no official receptions between the two islands.

The quartette enjoyed several very interesting walks. The natives pleased our Parisians. Their character is well marked, their hue brown, their physiognomy gentle and proud. And, although the Hawaiians were a republic, it is not likely that they regretted their former savage independence.

"The air of our country is free," says one of their proverbs, and they are none the less so.

"All I want is to get away!" replied Sebastien Zorn.

He would have been mistaken to have done so without admiring the chief places of Oahu. They are superb, if the flora is not rich. Along the shore there is an abundance of coconut-trees and other palms, breadfruit-trees, trilobas which yield the oil, castor-oil plants, daturas, indigo plants. The valleys, watered by the mountain streams, are carpeted with vegetation. The forest zone, prolonged to an altitude of two thousand metres, is covered with myrtles of lofty growth, colossal docks, and band-creepers, which intermingle like a many-branched thicket of serpents. As to the products of the soil which furnish items of commerce and exportation, there are rice, coconuts, and sugar-cane. Hence an important coasting trade between one island and another, so as to concentrate at Honolulu the products which are despatched to America. In the fauna there is little variety. If there is a tendency for the Kanakas to become absorbed in the more intelligent races, the species of animals show no sign of change. There are only pigs, fowls, and goats as domestic animals; there are no wild animals beyond a few pigs. There are mosquitoes, which are not easy to get rid of, a number of scorpions, and a few species of inoffensive lizards, birds that never sing, among others the Oo, of black plumage, with ornamental yellow feathers, of which was formed the famous mantle of Kamehameha, on which nine generations of natives had worked.

Man's task—a considerable one in this archipelago—has been to become civilised in imitation of the United States, with his learned societies, his schools of compulsory education, which gained a prize at the Exposition of 1878, his rich libraries, his newspapers published in English and Kanaka. Our Parisians could not well be surprised at this, for the notables of the archipelago are most of them Americans, and their language is as current as their money. Only these notables freely attract to their service the Chinese of the Celestial Empire, contrary to what is done in Western America, to combat the infliction to which has been given the significant name of the "Yellow Plague."

After the arrival of Floating Island within sight of the capital of Oahu many of the local boats often sailed round it. With this magnificent weather, this sea so calm, nothing could be pleasanter than an excursion of some twenty kilometres at a cable's length from the steel shore, over which the custom-house officers exercised such strict watch.

Among these excursion boats one could not help noticing a small vessel which every day persisted in sailing in Floating Island waters. It was a kind of Malay ketch, with two masts and a square stern, manned by twelve men under the orders of a captain of energetic appearance. The Governor, however, took no objection to this, although the practice might have seemed suspicious. These people, in fact, kept a constant watch on the island all round it, hanging about from one port to the other, examining through the glasses every part of the coast. After all, supposing that their intentions were unfriendly, what could such a crew undertake against a population of ten thousand inhabitants? So that there was nothing to be uneasy about in the proceedings of this ketch during the day and night, and the maritime administration of Honolulu was not appealed to in the matter.

The quartette bade farewell to the island of Oahu on the morning of the 10th of July. Floating Island got under way at the dawn, obediently to the impulsion of

its powerful propellers. Turning quite round, it headed south-west, to come in sight of the other Hawaiian islands. Moving obliquely across the equatorial current running from east to west, it moved in an inverse direction to that in which the archipelago lies towards the north.

Next day, when the sun reappeared, the ketch was only a white speck on the horizon.

During the day the voyage was continued between Kahaulaui and Maui. Owing to its extent, the latter, with Lahaina for its capital, a harbour renowned for its whalers, occupies the second place in the Sandwich Archipelago. Haleahala, "the house of the sun," rises three thousand metres towards the sky.

The two following days were spent in coasting along the shores of the Great Hawaii, whose mountains, as we have said, are the highest in the group. It was in the Bay that Captain Cook, after being received as a god by the natives, was massacred in 1779, a year after discovering the archipelago, to which he gave the name of Sandwich in honour of the celebrated Minister of Great Britain. Hilo, the chief place of the island, which is on the eastern coast, was not sighted ; but a view was obtained of Kailu on the western shore.

Next morning the Pearl of the Pacific had left these regions, and the ketch rounded the extreme point of Hawaii, dominated by Mauna Loa, the Great Mountain, whose summit is lost in the clouds at a height of twelve thousand feet.

"Come," said Pinchinat, "we have been cheated—really cheated !"

"You are right," said Yvernès ; "we ought to have been here a hundred years earlier. But then we should not have been brought here on this admirable Floating Island !"

"No matter. Having found natives in waistcoats and turn-down collars, instead of savages in feathers, as that rascal Calistus promised us, I regret the days of Captain Cook !"

“ And if these cannibals had eaten your Highness ? ” said Frascolin.

“ Well, I should have died with the consolation of having once in my life been loved for myself alone ! ”

CHAPTER IX

Since the 23rd of June the sun had been moving towards the southern hemisphere, and it had become necessary to leave these regions, wherein the bad season would soon exercise its ravages. As the star of day in its apparent course was nearing the equinoctial line, the island should cross the line in its track. Beyond were pleasant climates, where, in spite of the names of October, November, December, January, and February, the months were no less agreeable than those of the warm season. The distance which separates the Hawaiian archipelago from the Marquesas Islands is about three thousand kilometres, and Floating Island, being in haste to accomplish it, was driven at maximum speed.

Polynesia properly so-called is comprised within that wide extent of ocean bounded on the north by the Equator, on the south by the Tropic of Capricorn. In that five millions of square kilometres there are eleven groups composed of two hundred and twenty islands, a land surface of ten thousand kilometres, of which the islets can be counted in thousands. These are the summits of submarine mountains, of which the chain runs from the north-west to the south-east, to the Marquesas and Pitcairn, throwing out almost parallel ramifications.

Such were the principal groups amid which Floating Island was to bear its wealthy population. It justly deserved its name of the happy island, for in a certain way it offered all that could promote happiness. Why was it that this state of things was in danger of being troubled by the rivalries, the jealousies, the disagreements, by questions of influence and precedence which divided Milliard City

into two camps, as it were into two sections—the camp of the Tankerdons and the camp of the Coverleys? In any case, for the artistes, who were quite disinterested in the matter, the struggle promised to be interesting.

Jem Tankerdon was Yankee from his head to his feet, big in build, with a reddish goatee, lank hair, eyes bright in spite of his sixty years, the iris almost yellow like that of a dog's eye, the pupil glowing. He was tall in stature, powerful in the body, strong in the limbs. He was the trapper of the prairies, although the only traps he had set were those into which he had precipitated the millions of pigs in his slaughter-houses at Chicago. He was a violent man, whose position ought to have made him more careful, had not his early education been defective. He liked to show off his fortune, and, as people say, he had noisy pockets. And it seemed that he did not find them full enough, for he and a few others on the island were thinking of returning to business.

Mrs. Tankerdon was an American, a fairly good wife, very submissive to her husband, an excellent mother, gentle to her children, predestined to bring up a numerous family, and having in no way failed to fulfil her functions. If there were several millions to be shared amongst the direct heirs, why should there not be a dozen in the world? And there were.

Of the whole family, the attention of the quartette was directed only to the eldest son, who is destined to play a certain part in this history—Walter Tankerdon, most elegant in his person, of moderate intelligence, of pleasing manners and face, taking more after Mrs. Tankerdon than after the head of the family. Fairly well educated, having travelled in America and Europe, but recalled by his habits and tastes to the attractive life on Floating Island, he was familiar with every branch of sport, and the best player in the island at tennis, polo, golf, and cricket. He was not too proud of the fortune which would be his some day, and he was a good-hearted fellow; but, as there were no poor in

the island, he had no opportunity of being charitable. In short, it was to be desired that his brothers and sisters would resemble him. If these were not yet old enough to marry, he, who was nearly thirty, might think of doing so. Did he? We will see.

There existed a striking contrast between the Tankerdon family, the most important of the Larboard Section, and the Coverley family, the most considerable in the Starboard Section. Nat Coverley was of a much finer nature than his rival. That was due to the French origin of his ancestors. His fortune had not come from the entrails of the soil in the form of petroleum lakes, nor from the smoking entrails of the porcine race. No ! It was industrial enterprises, railways and banking, which had made him what he was. All he wanted was to enjoy his wealth in peace, and—he made no secret of it—he would oppose to the utmost every attempt to transform the Pearl of the Pacific into an enormous workshop or an immense house of business.

Tall, well set-up, his fine head grey-haired, wearing all his beard, the chestnut of which was streaked with a few silver threads. Somewhat cold in character, of distinguished manners, he occupied the first rank among the notables who in Milliard City kept up the traditions of good society in the Southern States. He loved the arts, understood painting and music, spoke easily the French language, which was much in use among the Starboardites, kept himself abreast of American and European literature, and when opportunity offered applauded in bravos and bravas which the ruder types of New England and the Far West applauded in hurrahs and hips.

Mrs. Coverley was ten years younger than her husband, and had just turned forty. She was an elegant, distinguished woman, belonging to one of the old demi-Creole families of Louisiana, a good musician, a good pianist, and it is not to be believed that a Reyer of the twentieth century would have proscribed the piano in Milliard City. In her house in Fifteenth Avenue the quartette had many an occasion

to perform with her assistance, and they could but congratulate her on her artistic talents.

Heaven had not blessed the Coverleys as it had blessed the Tankerdons. Three daughters were the heiresses of an immense fortune, which Coverley did not brag about as his rival did. They were good-looking enough, and would find suitors enough among the nobility of the wealthy when the time came for them to marry.

Diana, or rather Di, as she was familiarly called, the eldest daughter of Mr. and Mrs. Coverley, was barely twenty. She was a very pretty girl, and possessed the physical and mental qualities of her father and mother. Beautiful blue eyes, magnificent hair, between chestnut and blonde, an elegant and graceful figure, explained why Miss Coverley was the admired of the young men of Milliard City, who would not probably leave to strangers the task of winning this "inestimable treasure," as she might well be called. There was reason for supposing that Mr. Coverley would not see in difference of religion an obstacle to the union which seemed to assure the happiness of his daughter.

In truth, it was regrettable that questions of social rivalry separated the two leading families of Floating Island. Walter Tankerdon seemed to have been specially created to become the husband of Di Coverley.

But that was a combination not to be thought of. Rather cut the island in two, and let the Larboardites float away on one half, and the Starboardites on the other, than sign such a marriage contract.

"Providing that love does not enter into the matter!" said the superintendent, winking his eye behind his gold eyeglasses.

But it did not seem that Walter Tankerdon had any fancy for Di Coverley, and inversely—or at least, if it were so, they both maintained a reserve which deceived the curious of the select world of Milliard City.

The island continued to descend towards the Equator,

along the hundred and sixtieth meridian. Ahead of it extended that portion of the Pacific which offers the widest expanses destitute of islands and islets, and the depth of which reaches two leagues.

Every day, while his comrades walked in the park or in the surrounding country, Frascaolin, much interested by the details of this curious voyage, went to the Prow Battery. There he often met the Commodore. Ethel Simcoe gladly talked to him about the phenomena peculiar to these seas, and, when they were of interest, the second violin did not omit to communicate them to his companions.

For instance, they could not restrain their admiration in presence of a spectacle which Nature gratuitously offered them during the night of the 30th of July.

An immense shoal of jelly-fish, covering several square miles, had been signalled during the afternoon. Never before had the islanders met with such masses of these medusæ, to which certain naturalists have given the name of oceanians. These animals, of very rudimentary organisation, approach in their form to the products of the vegetable kingdom. The fish, greedy as they may be, treat them as flowers, for none, it seems, feeds on them. The oceanians peculiar to the torrid zone of the Pacific are of the shape of many-coloured umbrellas, transparent, and bordered with tentacles. They do not measure more than an inch or so ; judge then of the milliards required to form a shoal of such extent.

And when these numbers were mentioned in presence of Pinchinat :

“They could not,” remarked his Highness, “surprise these notables of Floating Island, for the milliard is the current coin.”

At nightfall, many of the people went out to the fore-castle, that is to say the terrace which looked down on Prow Battery. The trams were invaded ; the electric cars were loaded with sightseers. Elegant carriages conveyed the leading nabobs. The Coverleys and the Tankerdons

elbowed each other at a distance. Mr. Jem did not salute Mr. Nat, who did not salute Mr. Jem. The families were fully represented. Yvernès and Pinchinat had the pleasure of talking with Mrs. Coverley and her daughter, who always gave them a hearty welcome. Perhaps Walter Tankerdon felt a little annoyance at not being able to join in the conversation, and perhaps also Miss Di would not have been averse to his doing so. But what a scandal that would have caused and what illusions more or less indiscreet on the part of the *Starboard Chronicle* or the *New Herald* in their society article !

When the darkness is complete as far as it can be in these tropical starlight nights, the Pacific seems to sleep in its deepest depths. The immense mass of water is impregnated with phosphorescent lights, illuminated by rosy and blue reflections, not only in well-marked, luminous lines along the crests of the waves, but as if the light were shed from innumerable legions of gleaming worms. This phosphorescence becomes so intense that it is possible to read by it. It seems as if the Pacific dissolved the sunshine during the day and emitted it at night in luminous waves.

When the prow of Floating Island cut into the mass of medusæ, it divided it into two branches along its metal shore. In a few hours the island was girt by a belt of phosphorescent light. The phenomenon lasted until the birth of the dawn, the first hues of which extinguished it.

Six days afterwards the Pearl of the Pacific touched the imaginary circle of our globe which cuts the horizon into equal parts. From it the poles of the celestial sphere could be simultaneously seen, the one in the north illuminated by the scintillations of the Pole Star, the other in the south decorated like a soldier's breast with the Southern Cross. From the different points on this equatorial line the stars appeared to describe circles perpendicular to the plane of the horizon. If you would enjoy nights and days of equal length, it is in these regions or in continents and islands traversed by the Equator that you should make your home.

It was the second time since its creation that Floating Island had passed from one hemisphere to another, crossing the equinoctial line, first in descending towards the south, then in ascending towards the north. The occasion of this passage was kept as a holiday. There would be public games in the park, religious ceremonies in the temple and cathedral, races of electric vehicles round the island. From the platform of the observatory there would be a magnificent display of fireworks, from which the rockets and serpents and roman candles would rival the splendours of the stars of the firmament.

This, as you may have guessed, was in imitation of the fantastic scenes customary on ships when they cross the Equator, a pendant to the baptism of the line. And, as a fact, this day was always chosen for the baptism of the children born since the departure from Madeleine Bay, and there was a similar baptismal ceremony with regard to the strangers who had not before entered the southern hemisphere.

"It will be our turn then," said Frascolin to his comrades, "and we are going to receive baptism."

"Fancy!" replied Sebastien Zorn, with protesting gestures of indignation.

"Yes, my old bass scraper!" replied Pinchinat. "They will throw gun-blessed buckets of water on our head, seat us on planks that see-saw, pitch us into surprise depths, and Father Neptune will come on board with his company of buffoons to shave our faces with the black grease-pot."

"If they think," said Zorn, "that I will submit to this masquerade——"

"We shall have to," said Yvernès. "Every country has its customs, and the guests must submit."

"Not when they are detained against their will!" said the intractable chief of the Quartette Party.

He need not have excited himself about this carnival with which many crews amuse themselves when crossing the line! He need have had no fear of Father Neptune!

He and his comrades would not be sprinkled with seawater, but with champagne of the best brands. They would not be hoaxed by being shown the Equator previously drawn on the object glass of a telescope. That might do for sailors on board ship, but not for the serious people of Floating Island.

The festival took place in the afternoon of the 5th of August. With the exception of the custom-house officers, who were never allowed to leave their posts, the State servants all had a holiday. All work was suspended in the town and harbours. The screws did not work. The accumulators possessed a voltage sufficient for the lighting and communications. The island was not stationary, but drifted with the current towards the line which divides the two hemispheres of the globe. Chants and prayers were heard in the churches, in the temple as at St. Mary's Church, and the organs played cheerily. Great rejoicings took place in the park, where the sporting events were brought off with remarkable enthusiasm. The different classes associated together. The richest gentlemen, with Walter Tankerton at their head, did wonders at golf and tennis. When the sun had dropped perpendicularly below the horizon, leaving a twilight of only forty-eight minutes, the rockets would take their flight across space, and a moonless night would give the best of conditions for the display of firework magnificence.

In the large room of the casino the quartette were baptised as we have said, and by the hand of Cyrus Bikerstaff. The Governor offered them a foaming tankard, and the champagne flowed in torrents. The artistes had their full share of Cliquot and Roederer. Sebastien Zorn could not have the bad taste to complain of a baptism which in no way reminded him of the salt water he had imbibed in the earliest days of life.

To these testimonies of sympathy the quartette responded by the execution of the finest works in their repertory. The crush at the doors was tremendous, and the room was

suffocating. The pieces were encored and encored again, and the Governor presented to the executants a medal in gold encircled with diamonds respectable in the number of their carats, having on one face the arms of Milliard City, and on the other :

PRESENTED TO THE QUARTETTE PARTY
BY THE COMPANY, THE MUNICIPALITY, AND
THE PEOPLE OF FLOATING ISLAND

It was at thirty-five minutes past ten in the evening—the calculation was made by the astronomers of Floating Island—that the line would be crossed. At that precise moment a salute would be fired from one of the cannon in the Prow Battery. A wire connected this gun with an electric apparatus arranged in the centre of the square of the observatory. Extraordinary satisfaction of self-esteem for the notable on whom devolved the honour of sending the current which would provoke the formidable detonation !

On this occasion the honour was sought by two important personages. These were, as may be guessed, Jem Tankerdon and Nat Coverley. Consequently, considerable embarrassment for Cyrus Bikerstaff. Difficult negotiations had been taking place between the town hall and the two sections of the city. No agreement had been arrived at. At the Governor's invitation the services of Calistus Munbar had been called in. Despite his well-known diplomatic adroitness, he had failed. Jem Tankerdon would not give way to Nat Coverley, who would not give way to Jem Tankerdon. An explosion was expected.

It did not promise to be long in coming when the two chiefs met in the square. The apparatus was but five paces away from them. They had but to touch the button.

Aware of the difficulty, the crowd, much interested in this question of precedence, had invaded the garden. After the concert, Sebastien Zorn, Yvernès, Frascolin, and Pinchinat had come to the square, curious to observe the phases of

this rivalry, which, considering the dispositions of the Larboardites and Starboardites, was of exceptional gravity for the future.

The two notables advanced towards the apparatus, without the slightest inclination of the head.

"I think, sir," said Jem Tankerdon, "that you will not contest this honour."

"That is exactly what I expect from you, sir," replied Nat Coverley.

"I shall not allow anyone to deprive me of it."

"Nor shall I allow anyone to deprive me of it."

"We shall see, then!" said Jem Tankerdon, taking a step towards the instrument.

Nat Coverley also took a step. The partisans of the two notables began to mingle. Ill-sounding provocations broke out in the ranks. Doubtless Walter Tankerdon was ready to maintain the rights of his father; but when he caught sight of Miss Coverley, standing a little way off, he was embarrassed.

As to the Governor, although the superintendent was at his side, ready to act as buffer, he was in intense distress at not being able to unite in a single bouquet the white rose of York and the red rose of Lancaster. And who knows if this deplorable competition might not have consequences as regrettable as the roses had in the fifteenth century for the English aristocracy?

But the moment was approaching when the prow of Floating Island would cut the equinoctial line. Calculated precisely to a quarter of a second of time, the error could not be greater than eight metres. The signal would soon be sent from the observatory.

"I have an idea," murmured Pinchinat.

"What?" asked Yvernès.

"I will give a whack on the instrument, and that will put matters right."

"Don't do that!" said Frascaolin, stopping his Highness with a vigorous grip.

No one knew how the matter would have ended if a detonation had not suddenly taken place.

The report was certainly not from the Prow Battery. It came from a gun out at sea, which had been heard distinctly.

The crowd paused in suspense. What could be the meaning of this discharge of a gun which did not belong to the island's artillery?

A telegram from Starboard Harbour almost immediately gave the explanation.

Two or three miles off, a ship in distress had signalled its presence and demanded assistance.

Fortunate and unexpected diversion! There was no more thought of touching the button nor saluting the crossing of the Equator. There was no time. The Equator was crossed, and the charge remained in the cannon. All the better for the honour of the Tankerdons and Coverleys.

The public evacuated the square, and, as the trams were not working, proceeded rapidly on foot to Starboard Harbour.

Immediately the signal had been heard, the harbour-master had taken measures for the rescue. One of the electric launches moored in the wet dock had gone out. And at the moment the crowd arrived, the launch had brought back the crew from the ship, which had soon afterwards foundered in the Pacific.

The ship was the Malay ketch, which had followed Floating Island since its departure from the Sandwich archipelago.

CHAPTER X

Really the quartette would have been guilty of revolting ingratitude to Calistus Munbar if they had not thanked him for having, somewhat treacherously perhaps, brought them on to Floating Island. What mattered the means employed by the superintendent to make them the welcome, petted, and handsomely-paid guests of Milliard

City? Sebastien Zorn never ceased from sulking, for you can never change a hedgehog, with his prickly spines, into a cat with soft fur. But Yvernès, Pinchinat, and Frascaolin could not dream of a more delicious existence. An excursion with neither danger nor fatigue across these wonderful waters of the Pacific. Taking no part in the rivalry between the two camps, accepted as the island's soul of song, welcomed always by the Tankerdons and the chiefs of the Larboard section, as they were by the Coverleys and most distinguished families of the Starboard section, treated with honour by the Governor and his assistants at the town hall, by Commodore Simcoe and his officers at the observatory, by Colonel Stewart and his militia, giving their services at the temple and at the ceremonies in the cathedral, finding good friends in both ports, in the workshops, among the functionaries and servants of the State—could our compatriots, we ask any reasonable person, regret the time when they were travelling from city to city of the Federal Republic, and who is the man who would be sufficiently his own enemy not to envy them?

“You will kiss my hands!” the superintendent had told them at the first interview.

And if they had not done it, if they would never do it, it was because it is never necessary to kiss a masculine hand.

But at the same time there were a few black spots on the horizon. It must even be admitted that these black spots were gradually taking the form of electrified clouds, which before long would bring storm and tempest. Disquieting was this regrettable rivalry between the Tankerdons and the Coverleys—a rivalry which was approaching an acute stage. Their partisans made common cause with them. Were the two sections to fight each other some day? Was Milliard City threatened with troubles, outbreaks, revolutions? Would the council of administration have an arm energetic enough, and Governor Cyrus Bikerstaff have a hand firm enough to keep the peace between these

Capulets and Montagues of Floating Island? We can hardly say. Everything is possible with rivals whose self-esteem is, apparently, boundless.

Since the scene at the crossing of the line the two millionaires had been avowed enemies. Their friends supported them. All communication had ceased between the two sections. When they saw each other from afar they avoided each other, and if they met, what an exchange of menacing gestures and fierce looks! A rumour had spread that the old merchant of Chicago and a few of the Larboardites were going to found a trading business, that they were asking the company for permission to build a huge establishment, that they were going to import a hundred thousand pigs, and that they would slaughter them and salt them and sell them in the different archipelagoes of the Pacific.

After that it can easily be believed that the house of the Tankerdons and the house of the Coverleys were two powder magazines. It wanted but a spark to blow them up, and the island with them. Do not forget that the island was afloat above the deepest depths. It is true that this explosion would be only an explosion in a figurative sense, but the consequences would probably be that the notables would clear out. The proceeding would compromise the future and the financial position of the Floating Island Company.

All this was full of menacing complications, if not of actual catastrophes. And who knows if the latter were not to be feared?

In fact, if the authorities of the island had been less asleep in deceptive security, they might have done well to keep a watch on Captain Sarol and his Malays. Not that these people had said anything suspicious, not being talkative, living apart, keeping themselves clear of all connections, rejoicing in a state of happiness they would regret in their savage New Hebrides. Were there any grounds for suspecting them? Yes and no. But a more watchful observer would have noticed that they were exploring every part of

Floating Island, that they were constantly making notes of Milliard City, the position of its avenues, the situation of its palaces and its houses, as if they were making an exact plan of it. They were met with in the park and the country. They were frequently either at Larboard Harbour or Starboard Harbour, observing the arrival and departure of the ships. They were seen to take long walks exploring the coast where the custom-house officers were on duty day and night, and visiting the batteries at the bow and stern of the island. After all, what could be more natural? These out-of-work Malays could not employ their time better than in such walks, and what was there suspicious in that?

The Commodore gradually moved towards the south-west at reduced speed. Yvernès, as if he had been transformed since he had become a Floating Islander, abandoned himself to the charm of the voyage. So did Pinchinat and Frascaolin. What delightful hours were passed at the casino during the fortnightly concerts and the evenings when the crowd struggled for admission at prices that could only be paid in gold. Every morning, thanks to the newspapers of Milliard City, provided with fresh news by the cables and with facts a few days old by the steamers, they were informed of everything of interest that was happening in both continents in society, science, art, and politics. And from the last point of view it was noticeable that the English Press of all parties never ceased to complain about the existence of this moving island which had chosen the Pacific as the theatre of its excursions. But such recriminations were treated with contempt at Floating Island as in Madeleine Bay.

Let us not forget to mention that for some weeks now Sebastien Zorn and his comrades had been reading under the heading of foreign intelligence that their disappearance had been mentioned by the American journals. The celebrated Quartette Party, so well received in the States of the Union, so expected by those who had not yet had the pleasure of listening to them, could not vanish without a

good deal of fuss being made about their disappearance. San Diego had not seen them on the appointed date, and San Diego had raised a cry of alarm. Inquiries had been made, and it had been ascertained that the French artistes were on Floating Island after being carried off from the coast of Lower California. As they had not protested against their capture, there had been no exchange of diplomatic notes between the company and the Federal Republic. When it pleased the quartette to reappear on the scene of their success they would be welcome.

It goes without saying that the two violins and the alto had imposed silence on the violoncello, who would not have been sorry to be the cause of a declaration of war which would have brought about a contest between the new continent and the Pearl of the Pacific.

Besides, our instrumentalists had many times written to France since their departure from Madeleine Bay. Their families, relieved of all fears for their safety, frequently sent them letters, and the correspondence continued as regularly as the postal service between Paris and New York.

One morning—that of the 17th of September—Frascolin, installed in the library of the casino, felt a very natural desire to consult the map of this archipelago of Paumotu to which they were bound. As soon as he opened the atlas, as soon as his eye lighted on these regions of the Pacific, he exclaimed :

“A thousand treble strings ! How can Ethel Simcoe get through this chaos ? Never will he find a passage through this mass of islets and islands. There are hundreds of them ! A regular heap of pebbles in the middle of a pond. He will touch, he will run aground, he will hook his machine on to this point, he will knock it in on this. We shall end by remaining fixed in this group, which is more numerous than our Morbihan in Brittany.”

The judicious Frascolin was right. Morbihan has only three hundred and sixty-five islands—as many as there are days in the year—and in this Paumotu archipelago there are quite double as many. It is true that the sea which beats

on them is circumscribed by a girdle of coral reefs, the circumference of which, according to Elisée Reclus, is not less than six hundred and fifty leagues.

Nevertheless, in looking at the map of this group, one would feel astonished that a ship, and more than all such a peculiar vessel as Floating Island, should dare to venture through this archipelago. Comprised between the seventeenth and twenty-eighth parallels of south latitude, and between the hundred and fortieth and hundred and forty-seventh meridians of west longitude, it is composed of islands and islets—seven hundred at least—ranging from Mata-Hiva to Pitcairn.

It is not surprising, then, that this group has received several names, among others that of the Dangerous Archipelago and the Evil Sea. Thanks to that geographical prodigality of which the Pacific Ocean has the privilege, it is so called the Low Islands, the Taumotu Islands, which means the distant isles, the Southern Islands, the Isles of the Night, the Mysterious Islands. As to the name of Paumotu or Pamaoutou, which signifies the subject islands, a deputation from the archipelago assembled in 1850 at Papaete, the capital of Tahiti, protested against this designation. But although the French Government, deferring to this protest in 1852, chose among all these names that of Taumotu, it is more convenient to speak of them here under their better-known name of Paumotu.

Dangerous as the navigation might be, the Commodore did not hesitate. He was so accustomed to these seas that every confidence was to be placed in him. He manœuvred his island as if it were a canoe. He could spin it round within its own length. He was said to treat it as if it were a sculling-boat. Frascolin need have no fear for Floating Island ; the capes of Paumotu would not even be grazed by its hull of steel.

In the afternoon of the 19th the look-outs at the observatory reported the first appearance of the heights of the group twelve miles away. If a few rise some fifty metres

above the level of the sea, seventy-four of them rise but a yard or so, and would be under water twice a day if the tides were not almost imperceptible. The others are but atolls surrounded by breakers, coral banks of absolute aridity, mere reefs leading on to the larger islands of the archipelago.

While the Floating Islanders were content to wander indolently amidst the archipelago, which they had visited the preceding year, admiring its wonders as they passed, Pinchinat, Frascolin, Yvernès would have been glad of a few stoppages, that they might explore these islands due to the work of insect builders, that is to say artificial, like Floating Island.

"Only," said the Commodore, "ours has the power of movement."

"A little too much so," replied Pinchinat, "for it stops nowhere."

"It will stop at the islands of Hoa, Anaa, and Farakava, and you will have plenty of time to explore them."

When asked as to the mode of formation of these islands, Ethel Simcoe answered in the terms of the theory most generally adopted ; that is, that in this part of the Pacific the ocean bed has gradually sunk about thirty metres. The polyps (covalæ-insects) have formed on its sunken summits a solid foundation for their coral constructions. Little by little these constructions have risen stage by stage, owing to the work of the infusorians, who cannot work at great depths. They have reached the surface, they have formed this archipelago, the islands of which can be classed as barrier reefs, fringing reefs, and atolls—the Indian name of those provided with interior lagoons. Then the fragments dashed up by the waves have formed a vegetable mould ; seeds have been brought by the wind ; vegetation has appeared on their coral rings ; the calcareous margin is clothed with herbs and plants, and dotted with shrubs and trees under the influence of our intertropical climate.

"And who knows," asked Yvernès in a burst of prophetic

enthusiasm, "if the continent swallowed up by the waters of the Pacific will not appear again at its surface, reconstructed by these myriads of microscopic animalcules? And then on these regions, now ploughed by sailing-ships and steamers, there will run at full speed express trains which will connect the Old with the New World——"

"Take the handle off—take the handle off, my old Isaiah!" replied the disrespectful Pinchinat.

As the Commodore had said, Floating Island stopped on the 23rd of September off the island of Hao, which it was able to get rather near to, owing to the great depth of water. Its boats took several visitors through the passage, which on the right is sheltered by a curtain of coconut-trees. The principal village is six miles away on the top of a hill. The village consists of from two to three hundred inhabitants, for the most part pearl-fishers, employed as such by the merchants at Tahiti. There abound the pandanus and the mikimiki myrtle, which were the first trees of a soil whence now rises the sugar-cane, the pineapple, the taro, the tobacco, and above all the coconut-tree, of which the immense palm groves of the archipelago contain more than forty thousand.

One might say that this "tree of providence" succeeds almost without culture. Its nut serves as the customary food of the natives, being superior in nutritive substances to the fruits of the pandanus. With it they fatten their pigs, their poultry, and also their dogs, whose chops and steaks are much in demand. And then the coconut gives a valuable oil. When scraped, reduced to pulp, and dried in the sun, it is submitted to pressure in a very rudimentary machine. Ships take cargoes of these "copperas" to the continent, where the factories treat them in more profitable fashion.

It is not at Hao that an idea of the people of Paumotu can be gained. The natives there are not numerous, but where the quartette could observe them to advantage was in the island of Anaa, before which Floating Island arrived in the morning of the 27th of September.

Anaa shows its wooded masses of superb aspect from but a short distance. One of the largest islands of the archipelago, it is eighteen miles in length by nine in breadth, measured at its sea base.

We have said that in 1878 a cyclone ravaged this island and necessitated the transport of the capital of the archipelago to Farakava. That is true, although in this wonderful climate it was presumable that the devastation would be repaired in a few years. In fact, Anaa has become as flourishing as ever, and possesses fifteen hundred inhabitants. It is, however, inferior to Farakava, its rival, for a reason which is of importance ; the communication between the sea and the lagoon being through a narrow channel troubled with whirlpools. At Farakava, on the contrary, the lagoon has two wide openings to the north and south. At the same time, although the principal market for coconut-oil has been removed to Farakava, Anaa, which is more picturesque, always attracts the preference of visitors.

As soon as Floating Island had taken up its position in a favourable spot, a number of the Millionaires went ashore. Sebastien Zorn and his comrades were among the first, the violoncellist having consented to take part in the excursion.

At first they went to the village of Tuahora, after studying the way in which the island had been formed—a formation common to all the islands of this archipelago. Here the calcareous margin, the width of the ring, if you like, is from four to five metres, very steep towards the sea and sloping gently towards the lagoon, the circumference of which encloses about a hundred miles, as at Rairoa and Farakava. On this ring are massed thousands of coconut-trees, the principal, if not the only wealth of the island, the branches of which shelter the huts of the natives.

The village of Tuahora is traversed by a sandy road of dazzling whiteness. The French resident in the archipelago no longer lives at Anaa, since it has ceased to be the capital ; but his house is there, protected by a small fortification. On the banks of the little garrison, confided to the care of a

sergeant of marines, floats the tricolour. The houses of Tuahora are not undeserving of praise. They are not huts, but comfortable and salubrious dwellings, sufficiently furnished, and built for the most part on coral foundations. Their roofs are of the leaves of the pandanus, the wood of this valuable tree being used for the doors and windows. Occasionally they are surrounded with kitchen gardens, which the hand of the native has filled with vegetable soil, and their appearance is really enchanting.

If these natives, with their lighter colour, their less amiable character, are of a type less remarkable than those of the Marquesas, they yet offer fine specimens of the people of equatorial Oceania. Being intelligent and laborious workers, they may perhaps oppose more resistance to the physical degeneracy which menaces the Pacific Islanders.

Their principal industry, as Frascolin noticed, was the fabrication of coconut-oil ; hence the considerable quantity of coconut-trees in the palm gardens of the archipelago. These trees reproduce themselves, but they have one enemy, and the Parisian excursionists discovered it one day when they were stretched out on the beach of the interior lake, whose green waters contrasted with the azure of the surrounding sea.

At first their attention, and then their horror was provoked by a sound of creeping among the herbage.

What did they see ? A crustacean of enormous size.

Their first movement was to jump up, their second to look at the animal.

“ The ugly beast ! ” said Yvernès.

“ It is a crab,” said Frascolin.

A crab it was, the crab called “ birgo ” by the natives. Its front claws form two strong pincers or shears with which it opens the nuts on which it chiefly feeds. These birgos live in a kind of cave dug deeply in among the roots, the fibres of coconut being heaped up to form a bed. During the night more particularly they seek about for fallen nuts, and even catch hold of the trunk and branches to shake the fruit

down. The crab must have been seized with wolfish hunger, as Pinchinat said, to have left his dark retreat in broad daylight.

They let the animal alone, for the operation promised to be extremely curious. He found a large nut among the bushes, he tore off gradually the fibres with his pincers ; then, when the nut was bare, he attacked the hard skin, knocking it, hammering it at the same place. When he had made the opening the birgo picked out the interior substance, using his hind pincers, which are very narrow at the end.

"It is certain," observed Yvernès, "that Nature has created this birgo for opening coconuts."

"And that Nature created the coconut for feeding the birgo," added Frascolin.

"Well, suppose we frustrate the intentions of Nature by preventing this crab from eating this nut, and this nut from being eaten by this crab?" proposed Pinchinat.

"I beg you will not disturb him," said Yvernès. "Do not even to a birgo give a bad impression of Parisians on their travels."

They consented, and the crab, who had doubtless given an angry look at his Highness, gave a grateful glance at the first violin of the Quartette Party.

After a stay of sixty hours at Anaa, Floating Island moved off towards the north. It passed through the thicket of islets and islands, Commodore Simcoe following the channel with perfect sureness of hand. It need hardly be said that under these circumstances Milliard City was rather abandoned by its inhabitants for the shore, and especially that part of it about Prow Battery. Islands were constantly in view, or rather baskets of verdure which seemed to float on the surface of the waters. It looked like a flower market on one of the Dutch canals. Numerous canoes tacked about at the entrances to the harbours, but were not permitted to enter, the custom-house officers having received formal notice with regard to this. Numbers of native women came

swimming towards the island, when it went close to the coral reefs. If they did not accompany the men in the canoes, it was because their vessels are tabooed to the Paumotuans of fair sex, and they are forbidden to enter them.

On the 4th of October Floating Island stopped off Farakava, at the opening of the southern passage. Before the boats were got ready to take visitors ashore the French Resident presented himself at Starboard Harbour, whence the Governor gave orders to conduct him to the town hall.

The interview was very cordial. Cyrus Bikerstaff put on his official manner—which he kept for ceremonies of this nature. The resident, an old officer of infantry of marine, was in no way behind him. Impossible to imagine anything more serious, more dignified, more proper, more wooden on both sides !

The reception over, the Resident was invited to look round Milliard City, Calistus Munbar doing the honours. As Frenchmen, the Parisians were asked to accompany the superintendent.

Next day the Governor went to Farakava, to return the visit, and did so in the style of the day before. The quartette landed and went to the residency. It was a very simple habitation, occupied by a garrison of twelve old sailors, and from the mast was displayed the flag of France.

Although Farakava has become the capital, it cannot compare with its rival, Anaa. The principal village is not as picturesque under the verdure of the trees, and the people move about more.

Besides the manufacture of coconut-oil, the centre of which is at Farakava, the natives are employed in pearl-fishing. The mother-o'-pearl trade obliges them to frequent the neighbouring island of Toau, which is specially devoted to this industry. Bold divers, these natives do not hesitate to plunge to depths of twenty and thirty metres, accustomed as they are to support such pressures without inconvenience and to hold their breath for more than a minute.

A few of these fishermen were authorised to offer the products of their fishery, mother-o'-pearl or pearls, to the notables of Milliard City. Assuredly it was not jewels that these opulent dames were in want of. But these natural productions in their rough state were not easily procurable, and, the opportunity presenting itself, the fishers were able to sell at unheard-of prices. The moment Mrs. Tankerdon bought a pearl of great price, Mrs. Coverley must have another. Fortunately there was no opportunity of outbidding one another on some one thing different from anything else, for no one knows when the bidding would have stopped. Other families took heart to imitate their friends, and that day the Farakavans had a good time.

After twelve days, on the 13th of October, the Pearl of the Pacific started early. In leaving the capital of the Paumotu it had reached the western limit of the archipelago. Commodore Simcoe had no longer to be anxious regarding such a wonderful maze of isles and islets, reefs and atolls. He had come out of it without a scratch. Beyond extended that portion of the Pacific which over a space of four degrees separates the Paumotu group from the Society Islands. It was in heading south-west that Floating Island, driven by the million horses of its engine, proceeded towards the island so poetically celebrated as the enchantress Tahiti.

CHAPTER XI

The island of Tahiti was destined to become a stopping-place for Floating Island. Every year, before pursuing its route towards the tropic of Capricorn, its inhabitants would sojourn in the neighbourhood of Papaete. Received with sympathy by the French authorities as well as by the natives, they showed their gratitude by opening wide their gates, or rather their ports. Soldiers and civilians crowded on to the island, exploring the country, the park, the avenues, and probably no incident would happen to alter

this satisfactory state of affairs. At the departure, it is true, the Governor's police would have to assure themselves that the population had not been fraudulently increased by the intrusion of a few Tahitians, not authorised to take up their abode on his floating domain.

It followed that every latitude was given to the Milliardites to visit the islands of the group, when Commodore Simcoe called at one or the other of them.

In view of the stay here, a few rich families had rented villas in the environs of Papaete, and secured them in advance by telegraph. They intended to take up their quarters there, as the Parisians do in the neighbourhood of Paris, with their servants and horses, so as to live the life of large landowners, as tourists, excursionists, sportsmen, even although they had little taste for sport. In short, they would have a little country life without having anything to fear from the salubrious climate, the temperature of which ranges between thirty and forty degrees centigrade between April and December, the other months of the year constituting the winter in the southern hemisphere.

Among the notables who left their mansions on the island for their country houses ashore were the Tankerdons and the Coverleys. Mr. and Mrs. Tankerdon, their sons and their daughters, departed next day for a picturesque chalet on the heights of Tatao Point. Mr. and Mrs. Coverley, Miss Diana and her sisters, left their palace in Fifteenth Avenue for a delightful villa, hidden beneath the big trees of Venus Point. Between these habitations there was a distance of several miles, which Walter Tankerdon perhaps thought a little too long. But it was not in his power to bring these two points of the Tahitian coast any nearer. Besides, there were carriage roads, conveniently arranged to place them in direct communication with Papaete.

Frascolin remarked to Calistus Munbar that if they started in the morning, the two families could not be present at the visit of the commandant to the Governor.

“ Well, so much the better ! ” replied the superintendent,

his eyes brightening with diplomatic acuteness, "That will avoid any conflict between them. If the representative of France paid his first visit to the Coverleys, what would the Tankerdons say, and if he went to the Tankerdons, what would the Coverleys say? Cyrus Bikerstaff must be glad of their departure."

"Is there no reason for hoping that the rivalry of these families will end?" asked Frascolin.

"Who knows?" replied Calistus Munbar.

"It may perhaps depend on the amiable Walter and the charming Diana."

"Up to the present, however," observed Yvernès, "it does not seem that this heir and this heiress——"

"Good! good!" replied the superintendent. "It wants an opportunity, and if chance does not bring it about, we may have to take the place of chance—for the good of our beloved island."

In the afternoon of the 20th of October, the commander and his staff landed at Starboard Harbour. They were received by the Governor with the honours due to their rank. There was a salute from both batteries. Cars decorated with the French and Milliardite colours took the procession to the capital, where the rooms at the town hall were prepared for this interview. On the road there was a flattering reception from the population, and before the steps of the municipal palace an exchange of official speeches of regulation length.

Then came a visit to the temple, the cathedral, the observatory, the two electric works, the two harbours, the park, and finally a circular trip on the trams round the coast. On the return a luncheon was served in the grand hall of the casino. It was six o'clock when the commandant and his staff embarked for Papaete amid the thunders of the artillery of Standard Island, taking away with him a pleasing remembrance of this reception.

The next morning, the 21st of October, the four Parisians landed at Papaete. They had invited no one to accompany

them, not even the professor of deportment, whose legs were not suited for lengthy peregrinations. They were as free as the air—like schoolboys on a holiday, happy to have under foot a soil of rocks and vegetable mould.

In the first place they must visit Papaete. The capital of the archipelago is incontestably a pretty town. The quartette took a real pleasure in wandering about under the lovely trees which shaded the houses on the beach, and the offices and trading establishments near the harbour. Then, passing up one of the streets abutting on the quay, where a railway on the American system was working, our artistes ventured into the interior of the city.

There the streets are wide, as well-planned with rule and square as the avenues of Milliard City, among gardens of verdure and freshness. Even at this early hour there was a constant passing and repassing of Europeans and natives, and this animation, which would be greater after eight o'clock in the evening, would last all through the night. You understand that the tropical nights, and particularly Tahitian nights, are not made to spend in bed, although the beds of Papaete are composed of a network of coco-fibre, a palliasse of banana-leaves, and a mattress of tufts of the silk of the cotton tree, to say nothing of the net protecting the sleeper against the irritating attacks of mosquitoes.

As to the houses, it is easy to distinguish those which are European from those which are Tahitian. The former, built almost entirely of wood, are raised a few feet on blocks of masonry, and leave nothing to be desired in the way of comfort. The latter, of which there are not many in the town, are made of jointed bamboos, covered with matting, which renders them clean, airy, and agreeable.

But the natives ?

“ The natives ! ” said Frascolin to his comrades, “ There are no more here than at the Sandwich Islands ; we shall not find those gallant savages, who, before the conquest, dined on a human cutlet, and reserved for their sovereign

the eyes of a vanquished warrior roasted according to the recipe of Tahitian cookery ! ”

“ Ah, is that it ? ” asked Pinchinat. “ Then there are no more cannibals in Oceania. What ! we shall have voyaged thousands of miles without meeting one of them ! ”

“ Patience ! ” remarked the violoncellist, beating the air with his right hand, “ we may find one, if it is only to gratify your foolish curiosity.”

The Tahitians are of Malay origin, very probably, and of the race known as Maori. Raiatea, the Holy Island, was the cradle of their kings—a charming cradle washed by the limpid waters of the Pacific in the Windward group.

Before the arrival of the missionaries, Tahitian society comprised three classes : those of the princes, privileged persons who were recognised as possessing the gift of performing miracles ; chiefs, or owners of the soil, of little consideration, and reduced to servitude by the princes ; the common people, possessing nothing, or, when they did possess it, having nothing beyond a life interest in the land.

All this has been changed since the conquest, and even before, under the influence of the English and Catholic missionaries. But that which has not changed is the intelligence of the natives, their lively speech, their cheerful disposition, their unfailing courage, their physical beauty. The Parisians could not help admiring this in the town and in the country.

“ What fine men ! ” said one.

“ And what fine girls ! ” said another.

Men of a stature above the average, their skin copper-coloured, their proportions as admirable as those of antique statues, their faces gentle and prepossessing. These Maories are truly superb, with their large bright eyes, their rather thick but well-cut lips. Their tattooing for war purposes is disappearing with the occasions which formerly rendered it necessary.

The more wealthy natives clothe themselves in European fashion, and yet they look well with shirts cut to the figure,

vest of pale rose stuff, trousers falling over the boots. But these did not attract the attention of the quartette. No ! To the trousers of modern cut, our tourists preferred the pareo of cotton, coloured and striped, draped from the belt to the ankle, and in place of the high hat, and even the Panama hat, the head-dress common to both sexes, the hei, composed of leaves and flowers.

The women are still the poetic and graceful Otaheitans. The white petals of the tiara, a sort of gardenia, mingle with the black mats unrolled on their shoulders, their heads covered with the light hat made of the fibre of a coconut, but of which the sweet name of *revaerva* “seems to come from reverie,” as Yvernés said. Add to the charm of this costume, with its colours like those of a kaleidoscope modifying at every movement, the gracefulness of the walk, the freedom of the attitudes, the sweetness of the smile, the penetration of the look, the harmonious tone of the voice, and you will understand why, as soon as one of our artistes exclaimed, “What fine men !” the others should have answered in chorus :

“And what fine girls !”

During their excursions across this island, and in the neighbourhood of Papaete, the four Parisians did not cease to admire this world of vegetable wonders. Leaving the borders of the sea, which are more suited to cultivation—where the forests are replaced by plantations of lemon-trees, orange-trees, arrowroot, sugar-cane, coffee-plants, cotton-trees, fields of yams, manioc, indigo, and tobacco—they ventured under the masses of trees in the interior up to the foot of the mountains, whose summits rose above the dome of foliage. Everywhere were elegant coconut-trees of magnificent growth, miros- or rosewood-trees, ironwood-trees, guava-trees, mango-trees, and also the superb taro, the precious breadfruit tree, high in the stem, slender and white, with large brownish-green leaves, amid which are groups of large fruits, with chiselled bark, and of which the white pulp forms the principal food of the natives.

The tree which with the coconut is the commonest is the guava-tree, which grows all the way up the mountains, and whose name in the Tahitian tongue is tuava.

There were no dangerous animals. The only native quadruped is a sort of pig. As to the horses and cattle, they have been imported into the island, where they prosper like the sheep and goats. The fauna is much less rich than the flora, even with the birds included. There are pigeons and swallows as at the Sandwich Islands. There are no reptiles. There are centipedes and scorpions. And for insects there are wasps and mosquitoes.

The products of Tahiti are mainly cotton and sugarcane, the cultivation of which is largely developed, to the detriment of tobacco and coffee; besides these there are coconut-oil, arrowroot, oranges, nacre, and pearls.

The excursions of the quartette extended to the peninsula of Tabaratu. A visit to Fort Phaeton introduced them to a detachment of marine infantry, who were delighted to welcome their compatriots.

At an inn near the harbour, kept by a colonist, Frascolin stood treat. To the natives of the neighbourhood, there were glasses round of French wine, which the innkeeper did not forget to charge for. In return the locals offered their entertainers some of the products of the country, such as the preparation from a species of banana, of beautiful yellow colour, yams prepared in a succulent fashion, the breadfruit cooked to bursting in a hole full of hot stones, and finally a confection sourish in flavour, made from grated coconut, and which, under the name of taiero, is kept in bamboo twigs.

This luncheon was very jolly. The party smoked many hundreds of cigarettes made of tobacco leaf dried at the fire, and rolled within a pandanus leaf. Only, instead of imitating the Tahitian men and women, who pass them from mouth to mouth after taking a few whiffs, the Frenchmen preferred to smoke them in French fashion.

In the course of their excursions it need not be said

that the quartette returned every evening to Papaete or to Floating Island. Everywhere, in the villages, in the scattered habitations, among the colonies, among the natives, they were received with as much sympathy as comfort.

On the 7th of November they decided to visit Point Venus, an excursion undertaken by every tourist worthy of the name.

It was in this place, half-way up a verdant hill, that the Coverley family had fixed their residence. There was no apparent reason for Walter Tankerdon, whose villa was on the other side of Papaete, to be in the neighbourhood of Point Venus. The young man was, however, on horseback, close to the cottage of the Coverleys, and he exchanged a salute with the quartette, and asked them if they intended to return to Papaete that evening.

"No, Mr. Tankerdon," replied Frascolin. "We have received an invitation from Mrs. Coverley, and it is probable that we shall spend the evening at the villa."

"Then, gentlemen, I bid you good-bye," said Walter Tankerdon.

And it seemed as if the young man's face darkened as if a cloud had for a moment veiled the sun.

He then spurred his horse and went off at a gentle trot, giving a glance at the villa, which stood out white among the trees.

"Eh!" said Pinchinat. "Perhaps he would like to have accompanied us, this charming cavalier?"

"Yes," added Frascolin, "and it is evident that our friend Munbar may be right. He did not seem happy at not being able to meet Miss Coverley."

"That proves that millions do not bring happiness," replied Yvernès, like a great philosopher.

During the afternoon and evening a delightful time was spent with the Coverleys. At the villa the quartette met with as warm a welcome as at the house in Fifteenth Avenue. A sympathetic meeting in which art was agreeably mingled. The music was excellent—at the piano, be it understood. Mrs. Coverley played a few new pieces,

Miss Coverley sang like a true artiste, and Yvernès, who had a fine voice, mingled his tenor with her soprano.

We do not know why—perhaps designedly—Pinchinat slipped into the conversation that he and his comrades had met Walter Tankerdon in the neighbourhood of the villa. Was this clever on his part, or had he done better to have been silent? No, and if the superintendent had been there he could not but have approved of his Highness. A slight smile, almost imperceptible, flitted across Miss Coverley's lips, her beautiful eyes sparkled, and it seemed when she sang again as though her voice had become more penetrating.

Mrs. Coverley looked at her for a moment, and was content to say, while Mr. Coverley frowned :

"You are not tired, my child?"

"No, mother."

"And you, Monsieur Yvernès?"

"Not the least in the world, madam."

The evening came to an end, and it was nearly midnight when Mr. Coverley thought the time had come to retire to rest.

Next morning the quartette, enchanted at their simple and cordial reception, went back again down the road to Papaete.

The stay at Tahiti could not last longer than a week ; according to the programme which had been laid down in advance, Floating Island would then resume its route to the south-west. And without doubt there would have been nothing to distinguish this last week, during which the quartette completed their excursions, if a very pleasant incident had not happened on the 11th of November. The Division of the French squadron of the Pacific was signalled in the morning by the semaphore on the hill behind Papaete.

At eleven o'clock a cruiser of the first class, the *Paris*, escorted by two cruisers of the second class and a gunboat, dropped anchor in the roadstead.

The regulation salutes were exchanged, and the

rear-admiral, whose flag was flying on the *Paris*, landed with his officers.

After the official salutes, in which the Floating Island batteries took part, the rear-admiral and the commandant of the Society Islands returned each other's visits.

It was fortunate for the ships of the Divisions, their officers and crews, to have arrived in the roadstead of Tahiti while Floating Island was there. Here were new opportunities for receptions and festivities. The Pearl of the Pacific was open to the French sailors, who crowded to admire its wonders. For two days the uniforms of our navy mingled with the Milliardite costumes. Cyrus Bikerstaff did the honours at the observatory, the superintendent did the honours at the casino and the other establishments under his superintendence.

It was under these circumstances that an idea occurred to that astonishing Calistus Munbar, a genial idea, the realisation of which would never be forgotten, and this idea he communicated to the Governor, who adopted it at the advice of his council of notables.

Yes ! A grand festival was decreed for the 15th of November. Its programme included a set dinner and a ball given in the rooms of the town hall.

By this time all the Milliardites would have returned to the island, for the departure would take place two days afterwards.

The high personages of both sections would not fail to be present at this festival in honour of Queen Pomare IV, the Tahitians, native or European, and the French squadron.

Calistus Munbar was entrusted with the management of the festival, and his imagination and zeal could be relied on. The quartette offered their services, and it was agreed that a concert should figure among the most attractive feature of the programme.

As far as the invitations were concerned, the Governor undertook to send them out.

In the first place, Cyrus Bikerstaff went in person to Queen Pomare and the princes of her court to assist at the festivities, and the Queen deigned to reply by accepting the invitation. There were similar thanks on the part of the commandant and the chief French functionaries, and of the rear-admiral and his officers, who showed themselves deeply sensible of the kindness.

In short a thousand invitations were issued. It must be understood that the thousand guests could not sit down at the municipal table. No ! Only a hundred : the royal personages, the officers of the swardon, the authorities of the protectorate, the chief functionaries and council of notables, and superior clergy of Floating Island. But there would be in the park, refreshments, games, and fireworks, with which to satisfy the populace.

The King and Queen of Malecarlie were not forgotten, that need scarcely be said. But their Majesties, averse to all pomp, living retired in their modest habitation in the Thirty-second Avenue, thanked the Governor for an invitation they regretted to be unable to accept.

“ Poor sovereigns ! ” said Yvernès.

The great day arrived, and the island was decked with the French and Tahitian colours mingled with the Milliardite colours.

Queen Pomare and her court, in gala costume, were received at Starboard Harbour amid a salute from the island's artillery, replied to by the guns of Papaete and the guns of the fleet.

About six o'clock in the evening, after a promenade in the park, all the great ones went to the municipal palace, which was superbly decorated. What a splendid sight was the monumental staircase, every step of which cost at least ten thousand francs, like that at Vanderbilt's house in New York ! And in the splendid dining-hall the guests sat down at the tables.

The code of precedence was observed by the Governor with perfect tact. There was no reason for conflict between

the great rival families of the two sections. Everyone was contented with the places reserved for them, among others Miss Coverley, who found herself opposite Walter Tankerdon. That was as much as the young people could expect, for they could not be brought much nearer.

There is no need to say that the French artistes had nothing to complain of. They were placed at the table of honour, a new proof of esteem and sympathy for their talent and for themselves.

As to the bill of fare of this memorable repast, studied, meditated, and composed by the superintendent, it proved that even from the culinary point of view Milliard City had nothing to fear from Old Europe.

At nine o'clock the guests went to the casino for the concert.

This concert was a fresh triumph for the Parisian executants so fortunately embarked—no matter what the stubborn violoncellist might say—on Floating Island.

Meanwhile Europeans and strangers took part in the different games in the park. Open-air dances were organised on the lawns, and—why should we not admit it?—there was dancing to the music of accordions, which are instruments much in vogue among the natives of the Society Islands.

Besides, the natives of Tahiti, men and women, have a decided taste for singing and dancing, in which they excel. On this occasion they many times repeated the figures of the *repanipa*, which may be considered a national dance, of which the measure is marked by beating the tambourine. Thus dancers of all kinds, natives and foreigners, enjoyed themselves immensely, thanks to the stimulus of refreshments of all kinds provided by the municipality.

After the fireworks on the large lawn, dancing was resumed in the park and at the town hall, and continued until daylight.

Such was the memorable festival, of which the remembrance would be perpetuated through the long and happy

series of ages that the future—it was hoped—had in store for Floating Island.

Two days afterwards the stay terminated, and Commodore Simcoe gave orders to get under way at dawn. The roar of cannon saluted the departure of the island as it had saluted its arrival, and it returned the salutes gun for gun from both Tahiti and the naval division.

On the 19th of November, as the sun descended towards the horizon, the last summits of the archipelago disappeared.

Floating Island then steered south-west, as shown by the charts displayed on the windows of the casino.

And who at this moment would notice Captain Sarol, as, with a gloomy look in his eye and a fierce expression on his face, with a menacing hand he showed his Malays the route to the New Hebrides, situated twelve hundred leagues to the westward?

PART TWO

CHAPTER I

For six months, Floating Island, after leaving Madeleine Bay, had been voyaging from archipelago to archipelago across the Pacific. Not an accident had occurred in the course of this marvellous journey. At this period of the year equatorial regions are calm, the trade winds blowing steadily between the tropics. Even if there had been a storm, the solid basis which bore Milliard City, the two harbours, the park, and the country would not have experienced the least shock. The squall would have passed, the tempest would have abated. Hardly would it have been noticed on the surface of the Pearl of the Pacific.

That which was rather to be feared under these circumstances was the monotony of too uniform an existence. But our Parisians would have been the first to agree that there was none of this. On this immense desert of ocean oasis succeeded oasis, such as the groups they had already visited, the Sandwich Isles, the Marquesas, Paumotu, the Society Islands, such as those they would explore before turning northwards, the Cook Islands, Samoa, Fiji, the New Hebrides, and others, perhaps. So many stopping-places, so many opportunities of exploring these countries.

As far as the Quartette Party were concerned, how could they think of complaining even if they had the time? Perhaps they might consider themselves separated from the rest of the world. Were not the postal services with the two continents regular? Not only did the petroleum ships bring their cargoes for the wants of the electric works almost to the day, but there was not a fortnight without steamers unloading at Starboard Harbour or Larboard Harbour, their cargoes of all sorts and the batches of newspapers with which the inhabitants filled up their leisure time.

The salaries of the artistes were paid with a punctuality that bore witness to the inexhaustible resources of the

company. Thousands of dollars found their way into their pockets, and accumulated there, and they would be rich, very rich at the expiration of such an engagement.

"Come," said Frascolin one day to the violoncellist, "have you got over your prejudices against Floating Island?"

"No," replied Sebastien Zorn.

"And yet," added Pinchinat, "we shall have a good bag when the campaign is over."

"To have a good bag is not everything; you must be sure of carrying the bag away with you."

"And you are not sure?"

"No."

What answer could there be to that? And yet there was nothing to fear for the said bag, as the instalments in the form of bills had been sent to America, and paid into the Bank of New York. The best thing to do was to leave the obstinate man alone to his unjustifiable suspicions.

In fact, the future appeared more settled than ever. It seemed as though the rivalry of the two sections had entered on a period of appeasement. Cyrus Bikerstaff and his assistants had reason to congratulate themselves. The superintendent assumed more airs than ever since "the great event of the ball at the town hall." Yes! Walter Tankerdon had danced with Miss Coverley. Were people to conclude that the estrangement between the families had become easier? It was certain that Jean Tankerdon and his friends no longer spoke of making Floating Island an industrial and commercial island. In the best society the incident at the ball was much spoken of. A few persons saw in it a reconciliation, perhaps a union which might put an end to dissensions, private and public.

And if these provisions were realised, a young man and a young woman assuredly worthy of one another would accomplish their dearest wish we have every reason to believe.

There was no doubt that Walter Tankerdon had not

remained insensible to the charms of Miss Coverley. He had been so for a year already. Under the circumstances he had confided the secret of his feelings to no one. Miss Coverley had guessed it, she had understood him, and had been pleased at his discretion. Perhaps she had clearly read her own heart—and was this heart ready to respond to Walter's? She had let no sign of it appear. She was as distant as her dignity and the estrangement between the families demanded.

But an observer might have remarked that Walter and Miss Coverley never took part in the discussions which occasionally arose in the mansion in the Fifteenth Avenue or in that in the Nineteenth. When the intractable Jean Tankerdon abandoned himself to some growl against the Coverleys, his son would bow his head, remain silent, and retreat. When Nat Coverley stormed against the Tankerdons his daughter lowered her eyes, her pretty face turned pale, and she tried to turn the conversation—without succeeding, it is true. That these two personages saw nothing is the common lot of fathers, over whose eyes Nature has put a bandage. But—at least Calistus Munbar affirmed it—neither Mrs. Coverley nor Mrs. Tankerdon were in a similar state of blindness. The mothers had not eyes to see nothing, and this state of mind in their children was a subject of constant apprehension, as the only remedy possible was inapplicable. They felt that in face of the enmity between the rivals, in face of their self-esteem, constantly injured by questions of precedence, any reconciliation, any union was inadmissible. And yet Walter and Di loved one another. Their mothers had found that out.

More than once the young man had been asked to make his choice among the marriageable girls of the Larboard Section. There were many charming ones amongst them, perfectly educated, with fortunes almost equal to his own, and whose families would have been delighted at such a union. His father had spoken to him pretty plainly on the

subject, and so had his mother, though not so pressingly. Walter had always refused, giving as a reason that he had no desire to be married. But the old Chicago merchant would not listen to this—when you can get hundreds of millions as a wedding present you ought not to remain unmarried. If his son could not find a girl to his taste on Floating Island—among his own circle—well, let him travel through America or through Europe. With his name, his fortune, to say nothing of his appearance, he would have only too many to choose from—would he like a princess of the imperial or royal blood? Thus said John Tankerdon. Each time his father brought him to the foot of the wall, Walter declined to clear it, to go in search of a wife abroad. And once when his mother said to him :

“ My dear child, is there any girl here that you like ? ”

“ Yes, mother,” he replied.

And as Mrs. Tankerdon did not ask which girl, her son did not think it necessary to tell her.

A similar state of affairs existed in the Coverley family. That the old New Orleans banker wished to marry his daughter to one of the young fellows visiting the house, where the receptions were very fashionable, could not be doubted. If none of them were agreeable to her, well, her father and mother would willingly have consented to her marriage with a foreigner. They would visit France, Italy, England. Miss Coverley’s answer was that she did not wish to leave Milliard City. She was very well on Floating Island ; she only asked to be left there. Mr. Coverley was very uneasy at this reply, the real motive of which escaped him.

Besides, Mrs. Coverley had not put the question to her daughter as bluntly as Mrs. Tankerdon had to Walter, as need scarcely be said, and it is presumable that Miss Coverley would hardly have dared to reply with the same frankness—even to her mother.

This was how matters stood. Although neither of them could doubt the state of their feelings, and they had often

exchanged looks, they had never said a word to each other. If they had met, it was only at official entertainments, at the devotions of Cyrus Bikerstaff, at some ceremony at which the Milliardite notables felt it necessary to be present, if only to maintain their position. Under these circumstances Walter Tankerdon and Miss Coverley maintained complete reserve, being so placed that any imprudence might have the most unfortunate consequences.

Judge then of the effect produced by the extraordinary incident at the Governor's ball, an incident in which many endeavoured to see a scandal, and of which the whole town was talking next day. The superintendent had asked Miss Coverley to dance with him : he was not there at the opening of the quadrille—that artful Munbar ! Walter Tankerdon had offered himself in his place, and the lady had accepted him as her partner.

That explanation would be asked for regarding this fact, of such importance to the fashionable world of Milliard City, was probable, even certain. Mr. Tankerdon would question his son ; Mr. Coverley would question his daughter on the subject. What would Miss Coverley say ? What would Walter say ? Had Mrs. Coverley and Mrs. Tankerdon interfered, and what had been the result ? With all his ferret-like perspicacity, all his diplomatic acuteness, Calistus Munbar could not discover. When Frascolin asked him about it, he was content to reply with a wink of his right eye, which was worth nothing, for he knew absolutely nothing. The interesting thing to notice was that, since this memorable day, whenever Walter met Mrs. Coverley and Miss Coverley, he bowed respectfully, and the girl and her mother returned his salute.

According to the superintendent, this was “ an immense step in advance.”

In the morning of the 25th of November an event happened which had nothing to do with the position of the two preponderating families of Floating Island.

At daybreak the look-out at the observatory reported

several large vessels steering south-west. These ships were in line, keeping their distances. Evidently these formed a division of one of the Pacific squadrons.

Commodore Simcoe telegraphically informed the Governor, who gave orders for salutes to be exchanged with the ships of war.

Frascolin, Yvernès, and Pinchinat went to the observatory tower, in the hope of seeing this exchange of international courtesy.

The glasses were directed at these ships, to the number of four, which were from five to six miles distant. There was no flag at their peaks, and the Frenchmen could not recognise their nationality.

"Nothing indicates to what navy they belong?" said Frascolin to the officer.

"Nothing," he replied; "but from their appearance they are evidently British. Besides, in these parts we hardly ever meet with any men-of-war that are not either English, French, or American."

The ships were approaching at very moderate speed, and if they did not change their course they would pass very close to Floating Island.

A good many sightseers went out to the Prow Battery to watch the approach of the ships.

An hour later the vessels were within two miles of them. From their large funnels the smoke poured forth, which the westerly breeze bore to the furthest limits of the horizon.

When they were within a mile and a half, the officer was able to announce that they formed the British West Pacific division—Great Britain possessing or having under its protection certain archipelagoes in these parts, such as Tonga, Samoa, and Cook's Islands.

In the morning of the 29th of November, the look-outs caught sight of the first heights of Cook's Archipelago, situated in 20° S. lat. and 160° W. long.

The first island of the group to be met with was Mangaia, the most important and the most peopled—in fact, the

capital of the archipelago. The plan of campaign allowed of a stay here of a fortnight.

Was it, then, in this archipelago that Pinchinat was to make the acquaintance of veritable savages—savages like those of Robinson Crusoe, whom he had vainly sought in the Marquesas, in the Society Islands, and at Nuka Hiva? Was his Parisian curiosity about to be satisfied? Would he see absolutely authentic cannibals?

“My dear Zorn,” said he one day to his comrade, “if there are not cannibals here, there are none anywhere else!”

“I might say what does that matter to me? But let me ask why nowhere else?”

In fact, when Floating Island had arrived within a mile of Mangaia, a canoe put out and came alongside the pier at Starboard Harbour. It bore the minister, a German, who, more than the Mangaian chiefs, exercises his provoking tyranny over the archipelago. In this island—measuring thirty miles in circumference, peopled by four thousand inhabitants—which is carefully cultivated, rich in plantations of taros, in fields of arrowroot and yams, it was this gentleman who owned the best lands. His was the most comfortable house in Ouchora, the capital of the island, at the foot of a field crowded with breadfruit-trees, coconut-trees, pandanus-trees, bourras, pimentos, to say nothing of a flower garden, in which coleas, gardenias, and pæonies were in full bloom. His power was due to the mutois, those native policemen before whom their Mangaian Majesties have to bow.

When this fat little man landed, the officer of the port went to meet him, and salutes were exchanged.

“In the name of the King and Queen of Mangaia,” said the minister, “I present the compliments of their Majesties to his Excellency the Governor of Floating Island.”

“I am under orders to accept them, and to thank you,” replied the officer, “until our Governor goes in person to present his respects.”

"His Excellency will be welcome," said the minister. "The sanitary state of Floating Island leaves nothing to be desired, I suppose?"

"Never has it been better."

"There might, however, be a few slight epidemics, influenza, typhus, smallpox——"

"Not even a cold, sir. Will you, then, give us a clean bill, and as soon as we are at our moorings we can enter into communication in all due form."

"That," said the minister, not without a certain hesitation, "can only be done if the epidemic——"

"I tell you there is no trace of one."

"Then the inhabitants of Floating Island intend to land?"

"Yes, as they have recently done in the other groups to the eastward."

"Very well, very well," replied the stout little man. "Be sure they will be heartily welcome, from the moment that no epidemic——"

"None, I tell you."

"Let them land, then, in large numbers. The inhabitants will do their utmost to make them welcome, for the Mangaians are hospitable. Only——"

"Only?"

"Their Majesties, in accordance with the advice of the chiefs, have decided that at Mangaia, as at the other islands of the archipelago, strangers must pay a landing-tax."

"A tax?"

"Yes, two piastres. It is very little, you see; two piastres for every person landing on the island."

It was very evident that the minister was the author of this proposal, which the king and queen and council of chiefs had readily adopted, and of which a fair share was reserved for his Excellency. As in the groups of the Eastern Pacific there had never been such a tax heard of before, the officer of the port could not help expressing his surprise.

"Are you in earnest?" asked he.

"Quite in earnest," affirmed the minister, "and in default of payment we shall not let anybody——"

"All right!" replied the officer.

Then, bowing to his Excellency, he stepped into the telegraphic office, and reported the matter to the Commodore. Ethel Simcoe put himself in communication with the Governor. Was it advisable for Floating Island to stop off Mangaia under the circumstances?

The reply was not long in coming. After conferring with his assistants, Cyrus Bikerstaff refused to submit to this vexatious tax. Floating Island would not stop at Mangaia, nor at any of the archipelago. The greedy minister would get nothing by his proposition, and the Milliardites would, in the neighbouring archipelagoes, visit natives less rapacious and less exacting.

Orders were sent to the engineers to give the rein to their million horses, and that is why Pinchinat was deprived of the pleasure of shaking hands with cannibals—if there were any. But they do not eat each other now in Cook's Islands—which is perhaps regrettable.

Floating Island crossed the wide arm which projects up to the group of four islands, the line of which lies northward. A number of canoes were seen, some fairly well built and rigged, others merely dug out of the trunk of a tree but manned with hardy fishermen who venture in pursuit of the whales so numerous in these seas.

These islands are very verdant, very fertile. When off Mangaia, there could be seen its rocky coasts, bordered by a bracelet of coral, its houses of dazzling whiteness, rough cast with quicklime made from the coral reefs, its hills clothed with the sombre verdure of tropical vegetation, their altitude not exceeding two hundred metres.

Next morning Commodore Simcoe sighted the wooded heights of Rarotonga. Near the centre rises a volcano, fifteen hundred metres high, whose summit emerges from a crown of brushwood. Among the foliage is a white building with Gothic windows. This is the Protestant temple, built

amid large forests of maple-trees, which descend to the shore. The trees—of great height, and much branched and with curious trunks—are crooked and gnarled, like the old apple-trees of Normandy or the old olive-trees of Provence.

Cyrus Bikerstaff did not think it convenient to land at this island, and he was supported by the council of notables, who were accustomed to be received like kings on their travels.

At the end of the day no more of the island could be seen than the peak of the volcano, rising like a pillar on the horizon. Myriads of sea birds landed without permission and flew over Floating Island, but when night came they flew off to regain the islets incessantly lashed by the surges to the north of the archipelago.

Then a meeting was held, presided over by the Governor, in which it was proposed to modify the route of Floating Island. Continuing to the westward along the twentieth parallel, as had been decided, they would pass the Tonga Islands and the Fijis. But what had happened at Cook's Island was not very encouraging. Would it not be better to make for New Caledonia and the Loyalty Archipelago, where the Pearl of the Pacific would be received with French urbanity? Then after the December solstice they could return towards the Equator. It is true this would take them away from the New Hebrides, where they had promised to land the shipwrecked crew of the ketch.

During this deliberation as to a new route, the Malays were evidently a prey to very intelligible anxiety, for if the change were adopted their return home would be difficult. Captain Sarol could not conceal his disappointment or even his anger, and anyone who had heard him speaking to his men would probably have thought his irritation rather suspicious.

"You see," he said, "they will drop us at the Loyalties or at New Caledonia. And our friends are expecting us at Erromango. Our plans were so well arranged for the New Hebrides! Is this stroke of fortune to escape us?"

Fortunately for the Malays—unfortunately for Floating Island—the proposal for changing the route was not carried.

The campaign would be proceeded with according to the programme arranged at the departure from Madeleine Bay. Only, so as to make up for the fortnight which was to have been spent at Cook's Islands, it was decided to go to Samoa, steering north-west so as to touch at the Tonga Islands.

When this decision was known the Malays could not hide their satisfaction.

After all, what could be more natural, and had they not reason to be glad that the council of notables had not renounced its plan of putting them ashore at the New Hebrides ?

CHAPTER II

It was not by mere accident that the Malays had come to the Sandwich Islands. The ketch had put in at Honolulu with the intention of waiting for Floating Island at its annual visit. To follow it after its departure, to cruise in its waters without exciting suspicion, to be received as a shipwrecked crew, as they could not obtain admittance as passengers, and then, under pretext of being returned to their own country, to direct it towards the New Hebrides, had been Captain Sarol's plan all through.

We know how this plan in its first developments had been put into execution. The collision between the ketch and the other vessel was imaginary. No ship had run into them in the vicinity of the Equator. It was the Malays who had scuttled their ship, but in such a way that they could keep it afloat until the arrival of the assistance demanded by the signal of distress, and then sink when the launch from Starboard Harbour had taken off the crew. In this manner no suspicion could exist with regard to the collision, and no one could doubt that they were a shipwrecked crew when their ship was seen to sink, so that a shelter could not well be denied them.

It is true that the Governor might not care to keep them. Perhaps there were regulations forbidding strangers to

reside on the island? Perhaps it might be decided to land them on the nearest archipelago? That was a risk to run, and Captain Sarol ran it. But after the favourable opinion of the company it was resolved to keep the shipwrecked crew on the island, and take them within sight of the New Hebrides.

Such had been the course of events. For four months Captain Sarol and his ten Malays had been living at liberty on Floating Island. They had been exploring it throughout and penetrating all its secrets, and had neglected nothing in this respect. That suited them exactly. For a moment they had reason to fear that the itinerary would be modified by the council of notables, and they had been anxious to such an extent that their anxiety might seem suspicious. Fortunately for their plans, the itinerary had not been altered. In another three months Floating Island would arrive among the New Hebrides, and then would take place a catastrophe unequalled among disasters of the sea.

This archipelago of the New Hebrides is dangerous to navigation, not only by reason of the reefs which are scattered about it, and the rapidity of the currents, but also on account of the native ferocity of a part of its population. Since the epoch when it had been discovered by Quiros in 1706, since it had been explored by Bougainville in 1768, and by Cook in 1773, it had been the theatre of horrible massacres, and its evil reputation was enough to justify the fears of Sebastien Zorn regarding the result of this maritime campaign. Kanakas, Papuans, Malays are there mingled with Australian blacks—perfidious, dastardly, refractory to every attempt at civilisation. A few of the islands of the group are regular nests of rascals, and their inhabitants only live by piracies.

Captain Sarol, a Malay by birth, belonged to this class of pirates, whalers, sandalwood traders, slave dealers, who, as has been noticed by Dr. Hagon in his voyage in the New Hebrides, infest these regions. Audacious, enterprising, well acquainted with these archipelagoes of ill-repute, thoroughly

master of his trade, having more than once been in command of bloodthirsty expeditions, this Sarol was no novice, and his deeds had made him notorious in this part of the Western Pacific.

A few months before, Captain Sarol and his companions, having for their accomplices the murderous population of the Island of Erromango, one of the New Hebrides, had prepared an attempt which, if it succeeded, would enable them to live as respectable people wherever they pleased. They knew the reputation of this Floating Island, which the year before had voyaged in the tropics. They knew what incalculable riches were to be found in this opulent Milliard City. But, as it was not likely to venture so far to the west, it was necessary to allure it within sight of this savage Erromango, where everything was prepared for assuring its complete destruction.

On the other hand, although they would be reinforced by the natives of the neighbouring islands, these New Hebrideans had no intention of attacking Floating Island when in the open sea as if it were an ordinary merchant vessel, nor of boarding it from a fleet of canoes. Thanks to the sentiments of humanity the Malays had been able to take advantage of, without awaking suspicion, Floating Island would arrive in the neighbourhood of Erromango. She would anchor a short distance from the island. Thousands of natives would invade her by surprise. They would throw her on the rocks. They would smash her. They would hand her over to pillage, to massacre. In truth this horrible plot had many chances of success. In return for the hospitality accorded to Captain Sarol and his accomplices, the Milliardites were advancing to a supreme catastrophe.

On the 9th of December, Commodore Simcoe reached the hundred and seventy-first meridian, at its intersection with the fifteenth parallel. Between this meridian and the hundred and seventy-fifth lies the group of Samoa, visited by Bougainville in 1768, by La Perouse in 1787, by Edwards in 1791. Rose Island was first sighted in the north-west—

an inhabited island which did not even deserve the honour of a visit.

Two days afterwards the island of Manona was sighted, flanked by the two islets of Olosaga and Ofou. Its highest point rises seven hundred and sixty metres above sea level. Although it contains about two thousand inhabitants, it is not the most interesting island of the archipelago, and the governor gave no order to stop at it. It was better to stay a fortnight at the islands of Tetuila, Upolu, Savai, the most beautiful of the group. Manona rejoices in a certain celebrity in maritime annals. It was on its shores, at Ma Oma, that many of Cook's companions perished at the head of a bay which still retains its well-justified name of Massacre Bay.

Twenty leagues separate Manona from Tetuila, its neighbour. Floating Island approached it during the night of the 14th December. That evening, the quartette, who were walking in the vicinity of Prow Battery, had "smelt" Tetuila, although it was still several miles away. The air was laden with the most delicious perfumes.

"It is not an island," said Pinchinat, "it is Piver's shop, it is Lubin's manufactory, it is a fashionable perfumer's warehouse."

"If your Highness does not object," observed Yvernès, "I prefer to compare it to a casket of perfumes."

"Well, a scent-box, then," replied Pinchinat, who had no wish to oppose the poetic flights of his comrade.

And in truth it seemed as though a current of perfumes were being borne by the breeze over the surface of these wonderful waters. These were the emanations of that scented tree to which the Kanakas of Samoa have given the name of moussooi.

At sunrise, Floating Island was coasting along Tetuila, at about six cables' length from its northern shore. It looked like a basket of verdure, or rather tier upon tier of forests, rising to the summits, of which the highest exceeds seven-hundred metres. A few islets lay in front of it, among

others that of Amru. Hundreds of elegant canoes, manned by powerful, half-naked natives, working their paddles to a Samoan song in two-four time, were acting as escort. From fifty to sixty men were in some of them. This is no exaggeration for these long vessels, which are strongly enough built to go far out to sea. Our Parisians then understood why the early Europeans had given this archipelago the name of Navigators' Islands. But its true geographical name is Hamoa, or preferably Samoa.

Be it observed that none of these islands could offer such favourable climatic conditions as Floating Island. The temperature ranges between twenty-six and thirty-four degrees centigrade. July and August are the coldest months, and the highest temperature occurs in February. From December to April the Samoans are deluged with abundant rains, and this is also the period when occur the storms and hurricanes so fruitful of disasters.

The population, which is of Malayo-Polynesian origin, contains about three hundred whites and a few thousand labourers from different islands of Melanesia. Since 1830 the missionaries have converted the Samoans to Christianity, but they retain a few of the practices of their ancient religious rites. The great majority of the natives are Protestants, owing to the influence of Germany and England. Nevertheless, Catholicism has a few thousand converts, which the Mariste Fathers are doing their best to increase in number with a view of opposing Anglo-Saxon proselytism.

Floating Island stopped at the south of Tetuila, at the opening of Pago-Pago roadstead. This is the real port of the island, whose capital is Leone, situated in the central portion. This time there was no difficulty between Cyrus Bikerstaff and the Samoan authorities. Free pratique was accorded. It was not at Tetuila, but at Upolu that the sovereign of the archipelago resides, and where the English, American, and German residencies are established. There were no official receptions. A certain number of

Samoans took advantage of the opportunity of visiting Milliard City and its environs, while the Milliardites were assured that the population of the group would give them a cordial welcome.

The port is at the head of the bay. The shelter it offers against the winds from the offing is excellent and its access easy. Ships of war often put in there.

Among the first to land we need not be astonished at meeting Sebastien Zorn and his three comrades, accompanied by the superintendent, who had asked to join them. Calistus Munbar was as usual delightful and in high spirits. He had ascertained that an excursion to Leone in carriages drawn by New Zealand horses had been arranged among three or four families of notables. As the Coverleys and Tankerdons were going, perhaps there might be a meeting between Walter and Di, which would anything but displease him.

During the walk with the quartette he began talking about this great event in his usual grandiose way.

"My friends," he said, "we are in a regular comic opera. With a lucky accident we shall arrive at the end of the piece. A horse runs away—a carriage upsets——"

"An attack of brigands," said Yvernès.

"A general massacre of the excursionists," added Pinchinat.

"And that might happen," growled the violoncellist in a funereal voice, as if he were down in the depths of his fourth string.

"No, my friends, no," said Calistus Munbar. "Don't let us go as far as massacre. We need not go to that. Let us have a nice sort of accident, in which Walter Tankerdon will be lucky enough to save the life of Miss Coverley."

"And then a little music," said Pinchinat, working his hand as if he were turning the handle of a barrel-organ.

"And so," said Frascolin, "you are still thinking of this marriage?"

"Think of it, my dear Frascolin ! I dream of it night and

day. I am losing my good humour, though I do not look like it, I am getting thinner, though you would not think so. I shall die if it does not take place."

"It will," said Yvernès, in a voice of prophetic sonority, "for God does not at present require the death of your Excellency."

And they entered a native inn, and drank to the health of the future couple in several glasses of cocoa-milk, while they ate some luscious bananas.

Quite a joy to the eyes of the Parisians was this Samoan population in the streets of Pago-Pago, and amid the trees which surrounded the harbour. The men are of a stature above the average, their colour of a yellowish-brown, their heads round, their bodies powerful, their limbs muscular, their faces gentle and jovial. Perhaps there was too much tattooing on their arms and bodies, and even on their thighs, which were imperfectly hidden under a petticoat of grass and leaves. Their hair was black, straight or waved, according to the taste of native dandyism. But under the coating of white lime with which it was plastered it formed a wig.

"Savages in the style of Louis XV!" said Pinchinat. "They only want the cloak, the sword, the breeches, the stockings, the red-heeled shoes, the plumed hat, and the snuff-box, to figure at the receptions at Versailles."

The Samoans, women or girls, are as rudimentarily clothed as the men, tattooed on the hands and breast, their heads garlanded with gardenias, their necks ornamented with collars of red hibiscus, fully justifying the admiration with which they were described by the early navigators—at least, such as were young. But they were distant, and of rather affected prudery. Graceful and smiling, they enchanted the quartette, wishing them the *kalofa*, that is, the good-morning, in a sweet and melodious voice.

An excursion, or rather a pilgrimage, which our tourists had wished for, and which they performed on the morrow, gave them the opportunity of traversing the island from

one shore to the other. One of the country carriages took them to the opposite coast at Franca Bay, the name of which recalls a remembrance of France. There, on a monument of white coral, raised in 1884, is a plate of bronze bearing in engraved letters the never-to-be-forgotten names of Commandant De Langle, the naturalist Lamanon, and nine sailors, the companions of La Perouse, who were massacred here on the 11th of December, 1787.

Sebastien Zorn and his comrades returned to Pago-Pago through the interior of the island. What wonderful masses of trees, interlaced with lianas, coconut-trees, wild bananas, and many native species suitable for cabinet-making. Over the country stretched fields of taro, sugarcane, coffee plantations, cotton plantations, cinnamon-trees. Everywhere orange-trees, guava-trees, mangoes, avocado-trees, and climbing plants, orchids, and flowering shrubs. A flora astonishingly rich from this fertile soil, fertilised by a humid and warm climate. The Samoan fauna, reduced to a few birds, a few almost inoffensive reptiles, contains among its mammals only a small rat, the sole representative of the rodents.

Four days afterwards, on the 18th of December, Floating Island left Tetuila without any such providential accident as had been desired by the superintendent. But it was evident that the state of affairs between the two families continued to improve.

Hardly a dozen leagues separate Tetuila from Upolu. In the morning of the next day Commodore Simcoe passed in succession, at a distance of a quarter of a mile, the three islets of Nom-Tua, Samusu, Salafuta, which defend the island as if they were detached forts. He took Floating Island along with great ability, and in the afternoon reached his moorings in front of Apia.

Upolu is the most important island in the archipelago, with its sixteen thousand inhabitants. Here Germany, America, and England have established their representatives, united in a sort of council for the protection of the

interests of their nations. The sovereign of the group reigns amid his court at Malinuu, at the eastern extremity of Apia Point.

The aspect of Upolu is similar to that of Tetuila, a mass of mountains, dominated by the peak of Mount Mission, which constitutes the backbone of the island. These ancient extinct volcanoes are covered with thick forests, which clothe them up to their craters. At the foot of these mountains are plains and fields, joining on to the alluvial strip along the shore, in which the vegetation is in all the luxuriant variety of the tropics.

In the morning, the Governor and his assistants and a few notabilities landed at the fort of Apia. Their object was to pay an official visit to the representatives of Germany, England, and the United States of America, this composite municipality in whose hands are concentrated the administrative services of the archipelago.

While Cyrus Bikerstaff and his suite visited the residents, Sebastien Zorn, Frascolin, Yvernès, and Pinchinat, who had landed with them, occupied their leisure by visiting the town.

And at first sight they were struck with the contrast presented by the European houses with the huts of the old Kanaka village, in which the natives obstinately persist in living. These dwellings are comfortable, healthy, charming in a word. Scattered along the banks of the Apia River, their low roofs are sheltered under an elegant sunshade of palm-trees. There was no lack of animation in the harbour. This is the most frequented harbour of the group, and the headquarters of the Commercial Company of Hamburg, which owns a fleet employed in the local service between Samoa and the neighbouring islands.

But if the influence of the English, Americans, and Germans preponderates in this archipelago, France is represented by Catholic missionaries, whose devotion and zeal keep them in good repute among the Samoans. Genuine satisfaction, profound emotion even, seized our artistes when they perceived the little church of the

Mission, which has not the Puritan severity of the Protestant chapels, and a little beyond, on the hill, a school-house, on which the tricolour was flying.

They walked in this direction, and a few minutes afterwards they were being welcomed in the French quarters. The Maristes gave them a patriotic welcome. Three Fathers were in residence, employed in the services of the Mission, which includes two others at Savaii, and a certain number of sisters stationed in the islands.

What a pleasure it was to converse with the Superior, already advanced in years, who had lived in Samoa for a long time. He was so happy to welcome his fellow-countrymen, and, what was more—artistes of his nation. The conversation was varied with refreshing drinks of which the Mission possess the recipe.

“But first,” said the old man, “do not think, my dear sons, that the islands of our archipelago are in a savage state. It is not here that you will find natives who practise cannibalism.”

“We have not met with any up to the present,” said Frascolin.

“To our great regret,” added Pinchinat.

“Why do you regret?”

“Excuse me, Father, that is the confession of a curious Parisian! It is for love of local colour!”

“Oh,” said Sebastien Zorn, “we are not at the end of our campaign yet; and we may see more than we want to of these cannibals mentioned by our comrade.”

“That is possible,” replied the Superior. “Among the approaches to the Western groups, the New Hebrides, the Solomons, navigators can only venture with extreme prudence; but in Tahiti, the Marquesas, the Society Islands, as at Samoa, civilisation has made remarkable progress. I know that the massacre of the companions of La Perouse has given the Samoans the reputation of being ferocious aborigines, devoted to the practice of cannibalism; but there has been a great change since then, owing

to the influence of the religion of Christ. The natives of these times are looked after by the police, rejoicing in a European Government, with two chambers in the European style—and revolutions.”

“In European style?” observed Yvernès.

“As you say, my dear son, the Samoans are not exempt from political dissensions.”

“We have them on Floating Island,” replied Pinchinat.

“We are even expecting to have a dynastic war between two royal families.”

“In fact, my friends, there has been a struggle between King Tupua, who is descended from the ancient sovereigns of the archipelago, and whom we supported with our influence, and King Malietoa, the man of the English and Germans. Much blood was shed, particularly in the great battle of 1887. These kings saw themselves successively proclaimed and dethroned, and finally Malietoa was declared sovereign by the three powers, in conformity with the arrangements stipulated by the court of Berlin—Berlin!”

And the old missionary could not restrain a convulsive movement as the name escaped from his lips.

“You see,” said he, “up to now the influence of the Germans has been the dominating one at Samoa. Nine-tenths of the cultivated lands are in their hands. In the environs of Apia, at Suluafata, they have obtained from the Government a very important concession in the proximity of the port, which could serve as a victualling station for their ships of war. Quick-firing guns have been introduced by them. But all that will end some day.”

“To the advantage of France?” asked Frascolin.

“No; to the advantage of the United Kingdom!”

“Oh!” said Yvernès. “England or Germany!”

“No, my dear child,” replied the Superior; “there is a notable difference.”

The conversation ended, after the Superior had given divers details as to the customs of the Samoans. He added

that, if the majority belonged to the Wesleyan religion, Catholicism seemed to be making more progress every day. The church of the Mission was already too small for their services, and the school required early enlargement. He appeared very happy, and his guests rejoiced with him.

The stay of Floating Island at the Island of Upolu lasted three days.

The missionaries came to return the visit they had received. The French artistes took them through Milliard City, and they were struck with wonder. And why should we not say that in the room at the casino the Quartette Party entertained the Father and his colleagues with a few selections from their repertory? He wept with emotion, did the good old man, for he adored classical music, and to his great regret had never had an opportunity of hearing it at the festivals of Upolu.

The day before the departure, Sebastien Zorn, Frascolin, Pinchinat, Yvernès, accompanied this time by the professor of dancing and deportment, went to bid farewell to the old missionaries. The parting was most affectionate—the parting of people who had only known each other for a few days, and would never see each other again. The old man gave them his benediction and embraced them, and they retired in deep emotion.

Next day, the 23rd of December, Commodore Simcoe got under way at dawn, and Floating Island moved off amid a procession of canoes, who were to escort it to the neighbouring island of Savai.

This island is separated from Upolu by a strait of some seven or eight leagues. But the port of Apia being situated on the northern shore it is necessary to coast along this shore all day before reaching the strait.

According to the itinerary arranged by the Governor, it was not intended to make the tour of Savai, but to manœuvre between it and Upolu, so as to run down south-west to the Tongu Archipelago. For this reason Floating Island advanced at a very moderate speed, it

being undesirable to venture during the night through this strait, which is flanked by the small islands of Apolinia and Manono.

At daybreak Commodore Simcoe manœuvred between these two islands, of which one, Apolinia, contains only two hundred and fifty inhabitants, and the other, Manono, a thousand. These natives have the reputation of being the bravest and most honest Samoans in the archipelago.

From this place Savai could be admired in all its splendour. It is protected by impregnable cliffs of granite against the attacks of the sea, which the hurricanes, tornadoes, and cyclones of the winter season make more formidable. Savai is covered with thick forests, dominated by an ancient volcano twelve hundred metres high, dotted with gleaming villages beneath the domes of gigantic palm-trees, watered by tumultuous cascades, penetrated by deep caverns, from which escape the violent echoes of the beating of the waves on the shore.

And, if legend is to be believed, this island is the cradle of the Polynesian races, of which its eleven thousand inhabitants have retained the purest type. Its real name is Savaiki, the famous Eden of the Maori divinities.

Floating Island slowly moved away, and lost sight of its last heights in the evening of the 24th of December.

CHAPTER III

Since the 21st of December, the sun in its apparent movement, after stopping on the Tropic of Capricorn, recommenced its course towards the north, abandoning these regions to the inclemencies of winter, and bringing spring again to the northern hemisphere.

Floating Island was not more than a dozen degrees from the tropic. In descending to the islands of Tonga-Tabou, it reached the extreme latitude fixed by itinerary, and, continuing its course to the north, remained in the most favourable climatic conditions. It is true it could not avoid

a period of extreme heat while the sun was in the zenith, but this heat would be tempered by the sea breeze, and would diminish as the distance of the sun increased.

Between Samoa and the principal island of Tonga-Tabou there are eight degrees—about nine hundred kilometres. There was no need to increase the speed. Floating Island skimmed over this ever-beautiful sea which the atmosphere hardly troubled with storms, that were as rare as they were short-lived. It was enough to be at Tonga-Tabou in the first days of January, to remain there a week, and then to proceed to Fiji. From there Floating Island would run up to the New Hebrides, and there land the Malay crew ; then, heading north-east, it would regain the latitude of Madeleine Bay, and its second cruise would be at an end.

Life at Milliard City continued amid unchanging calm. Always this existence, as in one of the large towns of America or Europe—constant communications with the new continent by steamers or telegraphic cables, the usual family visits, the manifest tendency towards reconciliation between the two rival sections, the walks and games, the concerts of the quartette always in favour among the dilettanti.

Christmas, so dear to Protestants and Catholics, was celebrated with great pomp at the temple and at St. Mary's Church, as in the mansions, the hotels, and the houses of the commercial quarter. This solemnity meant a general holiday throughout the island during the week which ended on the 1st of January.

In the meantime, the newspapers of Floating Island, the *Starboard Chronicle* and the *New Herald*, did not cease from offering their readers the latest news, home and foreign. An item of news, published simultaneously by both papers, caused a good deal of comment.

In the papers for the 26th of December it was stated that the King of Malecarlie had been to the town hall, where the Governor had given him an audience. What was the object of this visit ? Rumours of all sorts flew about

the town, and they would doubtless have been based on the most unlikely guesses, if the newspapers next day had not contained positive information on this subject. The King of Malecarlie had asked for a place in the observatory, and the company had acceded to his request.

"Well," exclaimed Pinchinat, "you must live in Milliard City to see a thing like that ; a sovereign, with a glass to his eye, watching the stars on the horizon."

"A star of the earth interrogating his brothers in the firmament !" replied Yvernès.

The news was authentic, and this is why his Majesty was under the necessity of asking for the appointment.

He was a good king, this King of Malecarlie, and the princess his wife was a good queen. They had done all the good they could in one of the minor states of Europe, being of enlightened liberal minds, without pretending that their dynasty, although it was one of the most ancient on the old continent, was of divine origin. The king was well informed in scientific matters, a great admirer of art, and passionately fond of music. A learned man and a philosopher, he was in no way blind with regard to the future of European sovereignties, and he was always prepared to leave his kingdom as soon as his people wanted him no more. Having no direct heir, he in no way injured his family when the time came for him to abandon his throne and lay aside his crown.

This time had come three years before. But there had been no revolution in the kingdom of Malecarlie, or at least no blood had been shed. By mutual agreement the contract was broken between his Majesty and his subjects. The king became a man, his subjects became citizens, and he left without more fuss than if he had been a tourist who had taken his ticket at the railway station, leaving his government to be replaced by another.

Vigorous still at sixty years of age, the king rejoiced in a constitution better perhaps than that which his old kingdom had given itself. But the health of the queen was

rather precarious, and required a climate free from sudden changes of temperature. This approach to uniformity of climatic conditions it was difficult to meet with elsewhere than on Floating Island, since it appeared that she was not able to submit to the fatigue of running from latitude to latitude after fine weather. It seemed as though the invention of the Floating Island Company offered these advantages, as the wealthiest men in the United States had made it the town of their adoption.

That is why, as soon as Floating Island had been constructed, the King and Queen of Malecarlie had resolved to take up their abode in Milliard City. Permission to do so had been granted them on condition that they lived as simple citizens, without any distinction or privilege.

There was not much chance of their Majesties wishing to live otherwise. They rented a small house in the Thirty-ninth Avenue, in the Starboard Section, surrounded by a garden which opened on to the large park. There lived the two sovereigns in retirement, mixing in no way with the rivalries and intrigues of the rival section, and content with their humble existence. The king occupied himself in astronomical studies, for which he had always had a great taste. The queen, a sincere Catholic, lived a semi-cloistral life, having not even the opportunity of devoting herself to charitable works, inasmuch as misery was unknown on the Pearl of the Pacific.

Such is the story of these ancient masters of the kingdom of Malecarlie—a story which the superintendent related to our artistes, adding that this king and this queen were the best people it was possible to meet, although their fortune was relatively very small.

The quartette, greatly affected at this fall from high estate, borne with such philosophy and resignation, felt respectful sympathy for the dethroned sovereigns. Instead of taking refuge in France, that country of kings in exile, their Majesties had made choice of Floating Island as wealthy people make choice of Nice or Corfu, for reasons

of health. They were not, of course, exiles ; they had not been driven from their kingdom ; they could live there, they could return there, if they chose to do so, as simple citizens. But they had no thought of doing so, and were content with this peaceful existence, conforming to the laws and regulations of Floating Island.

That the King and Queen of Malecarlie were not rich was true enough, compared with the majority of the Milliardites, and relatively to the wants of life in Milliard City. What could you do with two hundred thousand francs of income, when the rent of a small house was fifty thousand ? The ex-sovereigns were not wealthy compared with the emperors and kings of Europe, who do not make much of a figure compared with the Goulds, Vanderbilts, Rothschilds, Astors, Mackays, and other deities of finance. Although they indulged in no luxuries, confining themselves only to necessities, they were not easy in their circumstances. But the queen's health was so well suited by this residence in the island, that the king had no thought of leaving it. Thus he wished to increase his income by his work, and, a situation becoming vacant at the observatory—a situation of which the salary was very high—he had applied for it to the Governor. Cyrus Bikerstaff, after consulting the general administration at Madeleine Bay, had granted the appointment to the sovereign, and that is why the newspapers had announced that the King of Malecarlie had been appointed astronomer of Floating Island.

What a subject for conversation in other countries ! There they talked about it for a couple of days and thought no more of it. It appeared quite natural that a king should seek in work the possibility of continuing this tranquil existence at Milliard City. He was a scientific man ; they would profit by his science. There was nothing in that but what was honourable. If he discovered some new star, planet, or comet, they would give it his name, which would figure with honour among the mythological names with which the official annuals swarm.

As they were walking in the park, Sebastien Zorn, Pinchinat, Yvernès, and Frascolin were talking about this event. In the morning they had seen the king going to his office, and they were not yet sufficiently Americanised to accept the situation as an everyday occurrence. Then they chatted about this matter, and Frascolin observed :

“ It seems that if his Majesty had not been capable of doing the work of an astronomer, he would have had to give lessons like a professor of music.”

“ A king going out teaching ! ” exclaimed Pinchinat.

“ Certainly, and at the price his rich pupils would pay him for his lessons——”

“ They say he is a very good musician,” observed Yvernès.

“ I am not surprised at his being enthusiastic over music,” added Sebastien Zorn ; “ for we have seen him at the door of the casino, during our concerts, owing to his not being able to afford a stall for the queen and himself.”

“ Well, fiddlers, I have an idea ! ” said Pinchinat.

“ An idea of his Highness’s,” replied the violoncellist, “ is sure to be a queer one.”

“ Queer or not, old Sebastien,” said Pinchinat, “ I am sure you will approve of it.”

“ Let us hear this idea,” said Frascolin.

“ To give a concert at their Majesties’, to them alone in their drawing-room, and to play the best pieces in our repertory.”

“ Well,” said Sebastien Zorn, “ your idea is not a bad one.”

“ Confound it, I have many like that in my head, and when I shake it——”

“ It sounds like a rattle ! ” said Yvernès.

“ My dear Pinchinat,” said Frascolin, “ let us be content to-day with your proposal. I am certain it would be a great pleasure to this good king and this good queen.”

“ To-morrow we will write and ask for an audience,” said Sebastien Zorn.

“ Better than that ! ” said Pinchinat. “ This very evening let us call at the royal habitation with our instruments, like a band of musicians come to give them a morning greeting——”

“ You mean a serenade,” said Yvernès, “ for it will be at night.”

“ Be it so, first violin, severe but just ! Do not let us juggle with words ! Is it agreed ? ”

“ Agreed.”

It was really an excellent idea. The king would no doubt appreciate this delicate attention, and be happy to hear the French artistes.

When the day closed in, the Quartette Party, laden with their violin cases and the violoncello box, left the casino in the direction of Thirty-ninth Avenue, situated at the extremity of the Starboard Section.

It was a very quiet house, having a small court in front with a verdant lawn. On one side were the domestic offices, on the other the stables, which were not used. The house consisted of a ground floor entered from a flight of steps, and a story surmounted by a mezzanine window and a mansard roof. On the right and left two magnificent nettle-trees shaded the double footpath which led to the garden. Beneath the trees in the garden, which did not measure two hundred superficial metres, extended a lawn. There was no comparison between this cottage and the mansions of the Coverleys, Tankerdons, and other notables of Milliard City. It was the retreat of a sage who lived in retirement, of a learned man, a philosopher. Abdolonymus would have been satisfied with it when he left the throne of the kings of Sidon.

The King of Malecarlie had for his only chamberlain a valet, and the queen for a maid of honour had but her lady's maid. Add to this an American cook, and you have all the household of the deposed sovereigns, who once on a time were brother to brother with the emperors of the old continent.

Frascolin touched an electric bell. The valet opened the gate.

Frascolin expressed the wish of himself and comrades to present their respects to his Majesty, and begged the favour of being admitted.

The servant asked them to enter, and they stopped before the flight of steps.

Almost immediately the valet returned to inform them that the king would receive them with pleasure. They were introduced into the vestibule, where they put down their instruments, then into the drawing-room, where their Majesties entered at the same instant. That was all the ceremonial of this reception.

The artistes bowed respectfully before the king and queen. The queen, very simply dressed in dark-coloured stuff, wore no head-dress but her abundant hair, whose grey locks gave a charm to her rather pale face and somewhat weary look. She sat in an armchair near the window which opened on to the garden, beyond which were the trees of the park.

The king, standing, replied to the greeting of the visitors, and asked them to say what motive had brought them to his house, which was away on the outskirts of Milliard City.

The quartette felt somewhat affected as they looked at this sovereign, whose appearance was one of inexpressible dignity. His look was keen under his almost black eyebrows—the profound look of a scientific man. His white beard fell large and silky on his chest. His face, of which a charming smile tempered the rather serious expression, could but arouse the sympathy of those who approached him.

Frascolin acted as spokesman, his voice trembling slightly.

“We thank your Majesty,” said he, “for having deigned to welcome artistes who desire to offer you their respectful homage.”

“The queen and I thank you, gentlemen, and we are sensible of your compliment. To this island, where we hope to end so troubled an existence, it seems as though you had brought a little of the fine air of your France.

Gentlemen, you are not unknown to a man who, though busy with science, is passionately fond of music, that art in which you have acquired such good reputation in the artistic world. We know the success you have obtained in Europe, in America. In the applause which welcomed the Quartette Party to Floating Island we have taken part—at a distance, it is true. And we have had one regret, that at not having yet heard you as you deserve to be heard.”

The king gave a sign for his guests to sit down, while he stood before the mantelpiece, the marble of which supported a magnificent bust of the queen, when young, by Franquetti.

To come to business, Frascolin had only to reply to the last sentence uttered by the king.

“Your Majesty is right,” said he, “and the regret expressed is fully justified as concerning that branch of music of which we are the interpreters. Chamber music demands more privacy than is obtainable with a numerous audience. It requires a little of the meditation of the sanctuary.”

“Yes, gentlemen,” said the queen, “this music should be heard as one would hear a strain of celestial harmony, and it is really in a sanctuary that it should——”

“Will, then, your Majesties,” said Yvernès, “allow us to transform this room into a sanctuary for an hour, and be heard by your Majesties alone——”

Yvernès had not finished these words when the faces of the two sovereigns brightened.

“Gentlemen,” said the king, “you wish—you had thought of this?”

“That is the object of our visit.”

“Ah!” said the king, extending his hand to them. “I therein recognise French musicians in whom the heart equals the talent. I thank you in the name of the queen and myself! Nothing—no! nothing could give us greater pleasure.”

And, while the valet received orders to bring in the

instruments and arrange the room for the improvised concert, the king and queen invited their guests to follow them into the garden. There they talked of music as artistes might in the completest intimacy.

Then Sebastien Zorn and his comrades took their instruments, and in the light of the electric lamp, which shed a gentle radiance through the room, they played the pieces they had chosen for this concert.

At eleven o'clock his Majesty said :

"We thank you, gentlemen, and our thanks come from the depths of our hearts. Thanks to the perfection of your execution, we have enjoyed artistic delights which nothing will make us forget ! It has done us so much good."

"If the king desires it," said Yvernès, "we could still——"

"Thank you, gentlemen, for the last time, thanks. We will not abuse your kindness. It is late, and then—to-night I am on duty——"

This expression, in the mouth of the king, recalled our artistes to the realities. Before the sovereign who thus spoke they felt somewhat confused—they lowered their eyes.

"Yes, gentlemen," continued the king, playfully, "am I not the astronomer of the observatory of Floating Island, and," added he, with some emotion, "inspector of stars—of falling stars ?"

CHAPTER IV

During the last week of the year, devoted to Christmas joys, numerous invitations were given for dinners, parties, and official receptions ; a banquet given by the Governor to the principal personages of Milliard City, attended by the Starboard and Larboard notables, testified to a certain fusion between the two sections of the town. The Tankerdons and the Coverleys found themselves at the same table. On New Year's Day there was an exchange of cards between the mansion in the Nineteenth Avenue and that in the Fifteenth. Walter Tankerdon even received an invitation

for one of Mrs. Coverley's concerts. The welcome with which he was received by the mistress of the house appeared to be of good augury. But was a long way from that to closer ties, although Calistus Munbar, in his characteristic way, was continually repeating to those who cared to listen to him :

"It is done, my friends, it is done."

Floating Island continued its peaceful navigation towards the archipelago of Tonga-Tabou. Nothing seemed likely to trouble it, when on the night of the 30th of December there occurred an unexpected meteorologic phenomenon.

Between two and three in the morning distant detonations were heard. The look-outs did not trouble about this more than was necessary. They did not suppose that it meant a naval combat, unless it was between the ships of those South American Republics who are frequently at war. After all, why should they trouble about it on Floating Island, an independent island at peace with the powers of the two worlds ?

Besides, these detonations, which came from the eastern parts of the Pacific, lasted until daylight, and certainly could not be mistaken for the full, regular roar of distant artillery.

Commodore Simcoe, informed by one of his officers, went to observe the horizon from the top of the observatory tower. There was no light visible on the surface of the wide segment of sea that lay before his eyes. But the sky had not its usual aspect. Reflections of flames coloured up to the zenith. The air appeared misty, although the weather was fine and the barometer did not indicate by a sudden fall any perturbation in the atmosphere.

At daybreak the early risers of Milliard City had a strange surprise. Not only did the detonations continue, but the air was full of red and black mist, a kind of impalpable dust, which began to fall like rain. You might call it a shower of sooty particles. In a few moments the streets of the town, the roofs of the houses were covered with a substance in which were combined the colours of carmine, madder, nacarat, and purple with blackish ashes.

The people were all out of doors. The quartette had, of course, jumped out of bed and gone to the observatory, where the Commodore, his officers, his astronomers, without forgetting the new royal functionary, were endeavouring to discover the cause of the phenomenon.

But what was the cause of this phenomenon? There have been many examples of these showers of red dust, composed of silica, alumina, chromic oxide, and ferric oxide. At the beginning of the century Clabria and the Abruzzi were inundated with these showers, which the superstitious inhabitants took for drops of blood, when, as at Blaucenberghe, in 1819, they were merely chloride of cobalt. There have also been clouds of molecules of soot or carbon from distant fires. There have even been showers of soot at Fernambouc in 1820, yellow showers at Orleans in 1829, and in the Basses Pyrenees in 1836 showers of pollen drifted from firs in bloom.

What origin could be attributed to this fall of dust mingled with scoriæ, with which the air seemed laden and which fell on Floating Island and the surrounding sea in thick reddish masses?

The King of Malecarlie gave it as his opinion that these substances came from some volcano in the islands to the west. His colleagues at the observatory agreed with him. They collected several handfuls of these scoriæ, the temperature of which was above that of the air, and which had not cooled down in their passage through the atmosphere. An eruption of great violence would explain the irregular detonations that had been heard. These regions are strewn with craters, some in activity, others extinct, but susceptible of revival under subterranean action; without counting those which geologic upheavals occasionally lift from the ocean's depths, the force of their projection being often extraordinary.

And in the midst of this archipelago of Tonga to which Floating Island was going, had not a few years before the peak of Tufua been covered with its eruptive matters for

an area of more than a hundred kilometres? And for hours had not the detonations of the volcano been heard two hundred kilometres away?

Then, in the month of August, 1883, the eruption of Krakatoa had desolated the parts of the islands of Java and Sumatra, adjoining Sunda Strait, destroying entire villages, causing earthquakes, covering the soil with compact mud, raising the sea in formidable waves, infecting the atmosphere with sulphurous vapours, and wrecking ships. Really, it might be asked if Floating Island was not threatened with dangers of this kind.

Commodore Simcoe began to be uneasy, for navigation threatened to become very difficult. He gave orders to slacken speed, and Floating Island began to move with extreme slowness.

A certain amount of alarm seized on the Milliardites. Were the dismal prophecies of Sebastien Zorn regarding the issue of the campaign on the point of realisation?

Towards noon the darkness was profound. The people had left their houses, which could not stand if the metal hull were lifted by plutonian forces. There was equal danger in the case of the sea rising and sweeping over the coast.

The Governor and the Commodore went to Prow Battery, followed by some of the people. Officers were sent to both harbours with orders to remain there. The engineers were at their posts ready to manœuvre the island if it became necessary to retreat in the opposite direction. The misfortune was that the navigation became more difficult as the sky grew darker.

About three o'clock in the afternoon the people could hardly see ten yards in front of them. There was no trace of diffused light, such was the mass of cinders which absorbed the solar rays. It was feared that Floating Island, laden with the weight of the scoriæ fallen on its surface, would not be able to maintain its water-line on the surface of the ocean.

It was not a ship that could be lightened by throwing

overboard cargo, or clearing it of its weight. All that could be done was to trust in the strength of the construction.

The evening, or rather the night, came, and still the only way to tell the time was by the clock. The darkness was complete. Beneath the shower of scorix it was impossible to keep the electric moons aloft, and they were brought down. But the lighting of the streets and houses, which had gone on through the day, was to be continued as long as the phenomenon lasted.

The night came ; the situation remained unchanged. It seemed, however, that the detonations were less frequent and also less violent. The fury of the eruption diminishing and the rain of cinder, carried away to the south by rather a strong breeze, began to abate.

The Milliardites, regaining confidence a little, went into their houses, hoping that next day Floating Island would find itself under normal conditions. And then they could proceed to a long and complete clearing up.

No matter ! What a miserable New Year's Day for the Pearl of the Pacific, and by how little Milliard City had escaped the fate of Pompeii and Herculaneum. Although it was not situated at the foot of Vesuvius, did not its voyage bring it within range of the volcanoes with which the bed of the Pacific is strewn ?

The Governor, his assistants, and the council of notables remained in constant attendance at the town hall. The look-outs on the tower watched every change on the horizon or at the zenith. So as to maintain its south-westerly direction, Floating Island had not stopped its progress, but its speed was only two or three miles an hour. When day came or at least when the darkness cleared off—its course would be laid for Tonga Archipelago. Then doubtless it would be ascertained which of the islands of this part of the ocean had been the theatre of such an eruption.

In any case, it was manifest as the night advanced that the phenomenon was passing away.

About three o'clock in the morning there was a fresh

incident which caused another outbreak of alarm among the dwellers in Milliard City.

Floating Island received a shock which was felt through all the compartments of its hull. The shock was not of sufficient force to cause the destruction of the houses or throw the engines out of work. The screws were not stopped in their propulsive movement. Nevertheless, there was no doubt there had been a collision at the fore-end.

What had happened ? Had Floating Island grounded on a shoal ? No, for it continued to move. Had it, then, struck against a reef ? Amid this profound darkness, had it run into some vessel crossing its course, which had not been able to see its lights ?

From this collision had there resulted any serious injuries, if not of a nature to imperil its safety, at least sufficient to require important repairs at the next stopping-place ?

Cyrus Bikerstaff and Commodore Simcoe made their way not without difficulty, through the thick bed of scorix and cinders to the Prow Battery.

There the customs' officers informed them that the shock was due to a collision. A ship of large tonnage, a steamer passing from west to east, had been rammed by the prow of Floating Island. The shock had not been serious for the island, but perhaps it had been different for the steamer. They had only sighted her at the moment of the collision. Shouts had been heard, but they had lasted only for a few moments. The chief of the station and his men had run to the battery, but had seen nothing and heard nothing. Had the vessel gone down where she was ? The hypothesis was unfortunately only too probable.

As to Floating Island, they had found that the collision had not caused it any serious damage. Its mass was such that even at reduced speed it would crumple in any vessel, no matter how strong she might be—even an ironclad of the first class—and sink it there and then. Something of this sort had doubtless happened.

As to the nationality of the ship, the chief of the station

thought he had heard orders given in a rough voice—one of those roars peculiar to the commanders of English vessels. He could not, however, say so positively.

This was a serious matter, and might have consequences no less serious. What would the United Kingdom say? An English vessel was a part of England, and we know that Great Britain does not allow amputation with impunity. What claims and responsibilities Floating Island might expect!

Thus the New Year began. At ten o'clock in the morning Commodore Simcoe was still unable to make any observations. The air was still thick with vapours, although the freshening breeze was beginning to blow away the rain of cinders. At length the sun pierced the mists of the horizon.

In what a state were Milliard City, the park, the country, the works, the ports! What a lot of cleaning had to be done! After all, that concerned the road officers. It was merely a question of time and money, and neither was wanting.

The most urgent work was started on first. The engineers went to Prow Battery on the side of the coast where the collision had occurred. The damages were insignificant. The solid hull of steel was no more injured than the wedge driven into a piece of wood—the ship for instance.

On the sea there was no wreckage. From the observatory tower the most powerful glasses could see nothing, although Floating Island had not moved two miles since the collision.

It was only right to prolong the investigations in the name of humanity.

The Governor conferred with Commodore Simcoe. Orders were given to the engineers to stop the engines, and to the electric launches of both ports to proceed to sea.

The search, which extended over a range of five or six miles, yielded no result. It seemed only too true that the vessel, rammed below the water-line, had sunk without leaving a trace of her disappearance.

Commodore Simcoe then resumed his ordinary speed.

At noon the observation indicated that Floating Island was a hundred and fifty miles south-west of Samoa.

Meanwhile, the look-outs were instructed to watch with extreme care.

About five o'clock in the evening they reported thick smoke in the south-west.

Was this smoke due to the final eruptions of the volcano which had so greatly troubled these regions? This was hardly likely, as the charts showed neither an island nor an islet in the vicinity. Had a new crater arisen from the sea?

No, and it was manifest that the smoke was approaching Floating Island.

An hour afterwards three vessels came in sight together, approaching rapidly.

Half an hour later they were recognised as ships of war. It was the Division of the British squadron which, five weeks before, had passed Floating Island.

At nightfall the ships were within four miles of Prow Battery. Were they going to pass in the offing and continue their course? It was not probable, as from their lights they seemed to be remaining stationary.

"These vessels evidently intend to communicate with us," said the Commodore to the Governor.

"Wait and see," replied Cyrus Bikerstaff.

But in what way would the Governor reply to the commander of the Division if he had come to make a claim with regard to the recent collision? It was possible, in fact, that such was his intention; perhaps the crew had been picked up, perhaps they had been saved in their boats. It would be time to act when they knew what was the matter.

They knew in the morning very early.

At sunrise, the flag of the rear-admiral floated from the mizzen of the leading cruiser, which slowly approached within two miles of Larboard Harbour. A boat was then launched and came towards the port.

A quarter of an hour afterwards Commodore Simcoe received the message:

"Captain Turner, of Her Britannic Majesty's cruiser

Herald, desires to be conducted at once to the Governor of Floating Island."

Cyrus Bikerstaff, being informed of this, authorised the officer of the port to allow the landing to take place, and replied that he would await Captain Turner at the town hall.

Ten minutes afterwards a car, placed at the disposal of the chief of staff, who was accompanied by a lieutenant, deposited these two personages before the municipal palace.

The Governor immediately received them in the room adjoining his office.

The usual salutations were exchanged—very stiffly on both sides.

Then, carefully punctuating his words, as if he were reciting some quotations from current literature, Captain Turner expressed himself thus in one long, interminable sentence :

"I have the honour to acquaint his Excellency the Governor of Floating Island, at this moment in a hundred and seventy-seven degrees thirteen minutes east of the meridian of Greenwich, and in sixteen degrees fifty-four minutes south latitude, that during the night of the 31st of December and the 1st of January the steamer *Glen*, of Glasgow, of three thousand five hundred tons, laden with wheat, indigo, rice, and wine, a cargo of considerable value, was run into by Floating Island, belonging to the Floating Island Company, Limited, whose offices are at Madeleine Bay, Lower California, United States of America, although the steamer was showing the regulation lights, a white at the foremast, green at the starboard side, and red at the port side, and that, having got clear after the collision she was met with next morning thirty-five miles from the scene of the disaster, ready to sink on account of a gap in her port side, and that she did sink after fortunately putting her captain, his officers, and crew on board the *Herald*, Her Britannic Majesty's cruiser of the first-class under the flag of Rear-Admiral Sir Edward Collinson, who reports the

fact to his Excellency Governor Cyrus Bikerstaff, requesting him to acknowledge the responsibility of the Floating Island Company, Limited, under the guarantee of the inhabitants of the said Floating Island, in favour of the owners of the said *Glen*, the value of which in hull, engines, and cargo amounts to the sum of twelve hundred thousand pounds sterling, that is six millions of dollars, which sum would be paid into the hands of the said Admiral Sir Edward Collinson, or in default, he will forcibly proceed against the said Floating Island."

One long sentence of about three hundred words, cut up with commas, but without a single full-stop. But it said all and left no way of escape. Yes or no, would the Governor decide to admit the claim made by Sir Edward Collinson, and accept the statement as to the responsibility of the company and the estimated value of twelve hundred thousand pounds attributed to the steamer *Glen*, of Glasgow?

Cyrus Bikerstaff replied by the usual arguments in cases of collision.

The weather was very obscure on account of a volcanic eruption which had happened in the westward. If the *Glen* had her lights going, so had Floating Island. Neither of them could see each other. The matter was beyond the control of either party; and, according to the usual practice in such matters, each had to bear his own losses, and there was no question of claim or responsibility.

Captain Turner's reply:

"His Excellency would doubtless be right in the case of two vessels navigating under ordinary conditions. If the *Glen* fulfilled these conditions, it was manifest that Floating Island did not; it could not be considered a ship; it constituted a constant danger in moving its enormous mass across the maritime routes; it was like an island, an islet, a reef which shifted its position in such a way that it could not be placed on the chart. England had always protested against this obstacle to which it was impossible to give a definite position hydrographically, and Floating Island would

always be responsible for accidents of this nature, etc., etc."

It was evident that Captain Turner's arguments were not devoid of a certain logic. In his heart Cyrus Bikerstaff felt that they were just. But he could not himself give a decision. The matter would be brought before those who had the right to do so, and all he could do was to acknowledge the receipt of Sir Edward Collinson's claim. Fortunately there had been no loss of life.

"Very fortunately," replied Captain Turner, "but there has been the loss of the ship, and thousands have been swallowed up in the damage done by Floating Island. Will the Governor consent to hand over to Admiral Sir Edward Collinson the estimated value of the *Glen* and her cargo?"

How could the Governor consent to this payment? After all, Floating Island offered a sufficient guarantee. It was there to answer for any damage, if the tribunals decided that it was responsible, after investigating the causes of the accident and the value of the loss.

"That is your Excellency's last word?" asked Captain Turner.

"That is my last word," said Cyrus Bikerstaff, "for I am not in a position to admit the company's responsibility."

Further salutes, stiffer than ever, exchanged between the Governor and the English captain. Departure of the latter by the car which took him to Larboard Harbour, and return to the *Herald* by the steam launch.

When Cyrus Bikerstaff's reply was made known to the council of notables, it received their full and entire approbation, as it did that of the whole population of Floating Island.

That being settled, Commodore Simcoe gave orders for Floating Island to resume its voyage at full speed.

But if Admiral Collinson persisted, would it be possible to evade his pursuit? Were not his vessels of much superior speed? And if he enforced his claim with a few melinite shells, would it be possible to resist it? Doubtless the batteries of the island were capable of replying to the Armstrongs with

which the cruisers of the division were armed. But the field offered to the English fire was infinitely greater. What would become of the women and children under the impossibility of finding shelter? Every shot would tell, while the batteries of the Prow and Stern would lose about fifty per cent. of their projectiles in aiming at a small and moving target.

It was therefore necessary to wait and see what Admiral Sir Edward Collinson would do.

They had not to wait long.

At nine forty-five a blank cartridge was fired from the central turret of the *Herald*, at the same time as the flag of the United Kingdom ran up to the masthead.

Under the presidency of the Governor and his assistants the council of notables was in session at the town hall. This time Jem Tankerdon and Nat Coverley were of the same opinion. These Americans, being practical men, did not think of attempting a resistance which might endanger the safety of everybody and everything on Floating Island.

A second gun was fired. This time a shell whistled over, aimed in such a way as to fall half a cable's length off in the sea, where it exploded with formidable violence, throwing up enormous masses of water.

By the Governor's orders Commodore Simcoe hauled down the flag which had been hoisted in reply to that of the *Herald*. Captain Turner returned to Larboard Harbour. There he received securities signed by Cyrus Bikerstaff, and endorsed by the chief notables, for the sum of twelve hundred thousand pounds.

Three hours later the smoke of the squadron disappeared in the west, and Floating Island continued its course towards the Tonga archipelago.

CHAPTER V

“And then,” said Yvernès, “we shall put in at the principal islands of Tonga-Tabou.”

“Yes, my dear fellow,” replied Calistus Munbar, “you

will have time to make acquaintance with this archipelago, which you can call the archipelago of Hapai, and even the Friendly Islands, as they were called by Captain Cook in acknowledgment of the good welcome he received."

"And we shall probably be better treated than we were at Cook's Islands," said Pinchinat.

"That is probable."

"Shall we visit all the islands of this group?" inquired Frascolin.

"Certainly not, considering that there are about a hundred and fifty of them."

"And afterwards?" asked Yvernès.

"Afterwards we shall go to the Fijis, then to the New Hebrides, then, as soon as we have landed those Malays, we shall return to Madeleine Bay, where our campaign will end."

"Will Floating Island stop at many places in the Tonga Islands?"

"At Vavoa and at Tonga-Tabou only," replied the superintendent, "and it is not there that you will find the real savages of your dreams, my dear Pinchinat."

"Evidently there are none in the West Pacific," replied his Highness.

"Pardon me, there are a respectable number in the New Hebrides and Solomon Islands. But at Tonga the subjects of George the First are almost civilised, and I may add the ladies are charming. I would not, however, advise you to marry one of these delightful Tongans."

"For what reason?"

"Because marriages between foreigners and natives are not usually happy."

"Good!" exclaimed Pinchinat, "and yet this old fiddler Zorn was thinking of getting married at Tonga-Tabou!"

"I!" retorted the violoncellist, shrugging his shoulders. "Neither at Tonga-Tabou nor elsewhere, understand, you clumsy joker."

In the morning of the 6th of January the heights of

Vavoa appeared on the horizon, the most important island of the northern group. This group is very different, owing to its volcanic formation, from the two others, Hapai and Tonga-Tabou. The three lay between 17 and 22° S. lat. and 176 and 178° W. lat. They have an area of two thousand four hundred square kilometres, distributed over a hundred and fifty islands, peopled by sixty thousand inhabitants.

The ships of Tasman were there in 1643, and Cook's ship in 1773, during the second voyage of discovery in the Pacific. After the overthrow of the dynasty of Finare-Finare, and the foundation of a Federal State in 1797, a civil war decimated the population of the archipelago.

Navigation is difficult enough amid this maze of islands and islets, planted with coconut-trees, which it is necessary to follow to reach Nu-Ofa, the capital of the Vavoa group. Vavoa is volcanic, and, being such, is subject to earthquakes. This is taken into account in building the houses, not one of which has a nail in it. Wattled rushes form the walls, and laths of coconut wood, and on piles or trunks of trees an oval roof is laid. The whole is very fresh and neat. This more particularly attracted the notice of our artistes, posted at Prow Battery, while Floating Island passed along the channels bordered with Kanaka villages. Here and there a few European houses displayed the flags of Germany or England.

But if this part of the archipelago is volcanic, it was not to one of its volcanoes that could be attributed the formidable eruption of scorix and cinders that had been spread over these regions. The Tongans had not even been plunged into darkness, the western breezes having driven the clouds of eruptive matter towards the opposite horizon. Probably the crater from which they came belonged to some isolated island in the east, unless it was a volcano of recent formation between Samoa and Tonga.

The stay at Vavoa lasted but a week. This island was worth visiting, although a few years before it had been ravaged by a terrible cyclone, which had thrown down

the little church of the French Maristes and destroyed a quantity of native dwellings. Nevertheless the country remained very attractive, with its numerous villages, enclosed by belts of orange-trees, its fertile plains, its fields of sugar-cane and yams, its clumps of banana-trees, mulberry-trees, breadfruit-trees, and sandalwood-trees. The only domestic animals were pigs and poultry. The only birds were thousands of pigeons and noisy parrots of brilliant colours. For reptiles there were only a few harmless serpents and lovely green lizards, which could be mistaken for leaves fallen from the trees.

The superintendent had not exaggerated the beauty of the native type—which is common to the Malay race of the different archipelagoes of the central Pacific. Superb men of tall stature, rather stout, perhaps, but of admirable build and noble attitude, and a colour as of copper shaded with olive. The women graceful and well proportioned, hands and feet of a delicacy and a smallness that must move to envy the Germans and English of the European colony. The women are employed only in the making of mats, baskets, and fabrics like those of Tahiti, and their fingers are not deformed by such manual labour. And then it is easy to judge of the perfection of Tongan beauty. Neither the abominable trousers nor the trained skirt had been adopted in the native fashions. Mere cotton drawers or a belt for the men, the caraco and short petticoat with ornaments in fine dried bark for the women, who are at once distant and coquettish. In both sexes the head-dress is elaborate, the girls raising their hair over their foreheads and piling it up on a trellis of coconut fibre in the shape of a comb.

Floating Island was to make its last stoppage there almost at the limit of the Tropic of Capricorn, the extreme point it would reach in the course of its voyage across the southern hemisphere.

After leaving Vavoa, the voyage of the *Milliardites* for two days was one of considerable variety. One island

was not lost sight of until another rose to view ; all of them presenting the same volcanic character due to the action of plutonian force. It was with this northern group as with the central group of Hapai. The hydrographic charts of these regions are extremely accurate, and allowed Commodore Simcoe to venture without danger amid the channels of the labyrinth between Hapai and Tonga-Tabou. Besides, there was no lack of pilots if he had wanted their services. A number of vessels were moving among the islands—for the most part schooners under the German flag employed in the coasting trade, while the larger merchant vessels take away the cotton and copra and coffee and maize, the principal productions of the archipelago. Not only would pilots have hastened to come if Ethel Simcoe had asked them, but also the crews of their double canoes, united by a platform and able to carry two hundred men. Yes ! Hundreds of natives would have come at the first signal, and what a harvest they would have had if the pilotage dues were calculated on the tonnage of Floating Island. Two hundred and fifty-nine million tons ! But Commodore Simcoe, to whom all these figures were familiar, had no want of their good offices. He had confidence in himself, and trusted to the merit of the officers who executed his orders with absolute precision.

Tonga-Tabou was sighted on the morning of the 9th of January, when Floating Island was but three or four miles away from it. Very low, its foundation not being due to geologic effort, it has not been thrust up from below like so many other islands that seem to have remained motionless after coming to the surface of the sea to breathe. It has been gradually built by insects, who have raised tier upon tier of coral, and what labour ! A hundred kilometres in circumference, an area of from seven to eight hundred superficial kilometres, on which live twenty thousand inhabitants.

Commodore Simcoe stopped off the port of Maofuga. Communications were immediately opened between the

sedentary island and the movable island, a sister of the Latona of mythologic memory. What a difference there was between this archipelago and the Marquesas, Paumotu, and the Society Islands ! English influence is here predominant, and King George I was in no hurry to offer a cordial welcome to these Milliardites of American origin.

However, at Maofuga the quartette discovered a small French centre. There resides the Bishop of Oceania, who was then making a pastoral tour among the different groups. There are the Catholic Mission, the house of the sisters, the schools for the boys and girls. Needless to say, the Parisians were received with cordiality by their compatriots. As to their excursions, there were only two places of importance for them to go to, Nakualofa, the capital, and the village of Mua, where four hundred inhabitants profess the Catholic religion.

When Tasman discovered Tonga-Tabou he gave it the name of Amsterdam—a name hardly justified by its houses of pandanus-leaves and coconut fibres. It is true that European habitations are not wanting ; but the native name is more appropriate for this island.

The port of Maofuga is situated on the northern coast. If Floating Island had taken up its position a few miles more to the west of Nakualofa, its royal gardens and its royal palace would have been in sight of it. If, on the contrary, Commodore Simcoe had gone more to the east, he would have found a bay cut deeply into the coast, the head of which is occupied by the village of Mua. He did not do this because the island would have run the risk of being wrecked among the hundreds of islets, the channels between which only give passage to vessels of moderate tonnage. Floating Island had therefore to remain off Maofuga during the whole of the stay.

Though a certain number of Milliardites landed, there were not many who thought of exploring the interior of the island. It is charming nevertheless, and deserves the praises which Elisée Reclus showered upon it. Doubtless

the heat is very great, the atmosphere stormy, the rains of extreme violence and calculated to calm the ardour of an excursionist, and a man must be touched with the tourist's mania who would venture into the country. Nevertheless, this is what Frascolin, Pinchinat, and Yvernès did, for it was impossible to persuade the violoncellist to leave his comfortable room in the casino before the evening, when the sea-breeze refreshed the beach of Maofuga. Even the superintendent begged to be excused for being unable to accompany the enthusiasts.

"I should melt on the road," he told them.

"Well, we could carry you along in a bottle!" replied his Highness.

This engaging prospect did not persuade Calistus Munbar, who preferred to retain his solid state.

Very fortunately for the Milliardites, the sun had been moving northward for three weeks, and Floating Island could keep it at a distance, so as to maintain a normal temperature.

Next morning the three friends left Maofuga at day-break and started for the capital of the island. Certainly it was warm; but the warmth was bearable under cover of the coconut-trees, the leki-lekis, the toui-touis, which are the candle-trees, the cocas, whose red and black berries formed bunches of dazzling gems.

It was nearly noon when the capital showed itself in full bloom—an expression which is not inappropriate at this season of the year. The King's palace seemed to rise from a gigantic bouquet of verdure. There was a striking contrast between the native huts, covered with flowers, and the houses of English aspect which belonged to the Protestant missionaries. The influence of these Wesleyan ministers has been considerable, and, after massacring a certain number of them, the Tongans have adopted their creed. Observe, however, that they have not entirely renounced the practices of their Kanaka mythology; with them the high priest is superior to the King. In the

teachings of their curious religion good and evil geniuses play an important part. Christianity will not easily uproot the taboo which is always held in honour, and when it has been decided to break it, it cannot be done without expiatory sacrifices in which human life is sometimes sacrificed.

It should be mentioned that according to the accounts of explorers—particularly that of Aylie Marin in his travels in 1882—Nakualofa is still but half-civilised.

Frascolin, Pinchinat, and Yvernès had no desire to pay their respects at the feet of King George. This is not to be understood in a metaphoric sense, as the custom is to kiss the sovereign's feet. And our Parisians congratulated themselves when, in the square of Nakualofa, they noticed the "tui" whom they call his Majesty, clothed in a sort of white shirt, with a little skirt of native stuff tied round his waist. This kissing of the feet would certainly have been among the most disagreeable remembrances of the voyage.

"You can see," said Pinchinat, "that watercourses are not very abundant in this country."

At Tonga-Tabou, at Vavao, as in the other islands of the archipelago, the maps show neither stream nor lagoon. The rain-water is collected in cisterns, and that is all the natives had, the subjects of George I being as careful with it as their sovereign.

During the day the three tourists, greatly fatigued, returned to the port of Maofuga, and regained their rooms in the casino with great satisfaction. To the incredulous Sebastien Zorn they affirmed that their excursion had been most interesting. But the poetic inducements of Yvernès could not prevail on the violoncellist to start next morning for the village of Mua.

The journey promised to be long and very fatiguing. They might have easily spared themselves this fatigue by using one of the electric launches that Cyrus Bikerstaff offered to put at their disposal. But to explore the interior of this curious country was a consideration of some value, and the tourists started on foot for Mua Bay along the coral

shore which bordered the islets, where there seemed to have collected all the coconut-trees in Oceania.

Their arrival at Mua could not take place before the afternoon. There was a place evidently pointed out for the Frenchmen to stay at. This was the residence of the Catholic missionaries. In welcoming his guests, the Superior's delight was most affecting—the welcome recalled the way in which they had been received by the Maristes of Samoa. What an excellent evening ! What interesting conversation, in which France was more talked of than the Tongan colony ! These good men could not think without regret of their native land so far away.

It was with a certain pride that the Superior showed, to the admiration of his visitors, the establishments of the Mission—the house which was built for nothing by the natives of Mua, and the beautiful church due to the Tongan architects, of which their brethren in France would not be ashamed.

During the evening they took a walk in the environs of the village and visited the ancient tombs of Tui-Tonga, where schist and coral are intermingled with primitive and charming art. They even visited that old plantation of meas, banyans, or monstrous fig-trees, with their roots interlaced like serpents, the circumference of which, in places, exceeds sixty metres. Frascolin measured them, and, having entered the figures in his note-book, had them certified as correct by the Superior. After that, there could be no doubt as to the existence of such a vegetable phenomenon.

A good supper was followed by a good night in the best rooms of the Mission. After that was a good breakfast and hearty farewells from the missionaries, and the return to Floating Island as five o'clock was striking from the belfry of the town hall. This time the three excursionists had not to have recourse to very tall stories to assure Sebastien Zorn that their journey had left them with pleasant memories.

Next day Cyrus Bikerstaff received a visit from Captain Sarol under the following circumstances.

A certain number of Malays—about a hundred—had been recruited at the New Hebrides and taken to Tonga-Tabou to work in the clearings—an indispensable importation considering the indifference, or rather idleness, of the Tongans, who live from day to day. These clearings had been finished a short time before, and the Malays were awaiting an opportunity of returning to their country. Would the Governor allow them to take passage on Floating Island? It was this permission which Captain Sarol had come to ask. In five or six weeks they would arrive at Erromango, and the carriage of these natives would not be much expense.

It would not have been generous to refuse these men a service so easy to render; and so the Governor gave his permission, for which he was thanked by Captain Sarol, and also by the Maristes of Tonga-Tabou, for whom these Malays had been imported.

Who could doubt that Captain Sarol had in this way increased the number of his accomplices? That these New Hebrideans would come to his assistance when he had need of them, and that he could only congratulate himself at having met with them at Tonga-Tabou and introduced them on to Floating Island?

This was the last day the Milliardites were to spend in the archipelago, the departure being fixed for the morning.

During the afternoon they were able to be present at one of those half-civil, half-religious festivals in which the natives take part with extraordinary enthusiasm.

The programme of these festivals, to which the Tongans are as partial as their relatives in Samoa and the Marquesas, comprised several dances. As these were of a kind to interest our Parisians, they went ashore about three o'clock.

When they arrived on the spot, the festival was in full swing. The Kava liquor extracted from the dried root of the pepper-plant was circulating in gourds and flowing down the throats of a hundred dancers, men and women, young men and girls, the girls having coquettishly decorated

their long hair, which they had to wear in that fashion until their wedding-day.

The orchestra was of the simplest. For instruments, the nasal flute known as the fanghu-fanghu, more than a dozen nafas, as the drums are called, on which they thump vigorously, "and even in time," as Pinchinat remarked.

First there were seated dances, composed of attitudes, pantomimic gestures, balancing of the body, to a rhythm slow and sad and of strange effect.

To these succeeded standing dances, in which the Tongans abandoned themselves to all impetuosity of their temperament, representing in pantomime the fury of warriors on the war-path. The quartette looked at this spectacle from an artistic point of view, and wondered what the natives would have done if they had been excited by the fascinating music of a Parisian ball-room.

And then Pinchinat—the idea was characteristic—proposed to his comrades to send for their instruments from the casino, and treat these dancers to the wildest six-eights and most formidable two-fours.

The proposal was agreed to, and Calistus Munbar had no doubt that the effect would be prodigious.

Half an hour afterwards the instruments had been brought, and the players began.

Immense surprise of the natives, and also immense delight at listening to this violoncello and these three violins, going at their loudest, and giving off music that was ultra-French.

The natives remained not unaffected, and it was clearly proved that their characteristic dances are instinctive, that they learn without masters. The men and women strove to outdo each other in leaping and swaying when Sebastien Zorn, Yvernès, Frascolin, and Pinchinat attacked the furious rhythms of "*Orphée aux Enfers*." The superintendent could not contain himself, and took part in a wild quadrille, while the professor of dancing and deportment veiled his face before such horrors. At the height of

this noise, in which mingled the nasal flutes and the sonorous drums, the fury of the dancers attained its maximum of intensity, and we know not where it would have stopped, if something had not happened to put an end to it.

A Tongan—tall and very strong—wonder-struck at the notes which the violoncellist drew from his instrument, hurled himself on the violoncello, seized it, and rushed away with it, shouting “Taboo ! taboo !”

The violoncello was tabooed ! It could not be touched again without sacrilege ! The high priest, King George, the dignitaries of his court, the whole population of the island would rise, if this sacred custom were violated.

Sebastien Zorn did not care about this. He had no idea of parting with this masterpiece. Off he went after the thief. In a moment his comrades were following in pursuit. There was a general stampede.

But the Tongan sprang along with such speed that they had to give up their attempt to catch him. In a few minutes he was far away, very far away.

Sebastien Zorn and the others, unable to do more, returned to find Calistus Munbar, out of breath. To say that the violoncellist was in a state of indescribable fury would be insufficient. He foamed, he choked. Tabooed or not, they would have to give him back his instrument. Even if Floating Island had to declare war against Tonga-Tabou—and had not war broken out for less serious motives?—the violoncello must be restored to its owner.

Fortunately, the authorities of the island had intervened in the matter. An hour later they had caught the native, and obliged him to bring back the instrument. The restitution was not effected without trouble, and a crisis was only just avoided in which the ultimatum of Cyrus Bikerstaff might, on this question of taboo, have perhaps raised the religious passion of the whole archipelago.

But the breaking of the taboo had to take place in regular form, according to the usual ceremonies. As was customary, a considerable number of pigs had their throats cut, and

were cooked in a hole filled with hot stones, and there were sweet potatoes, taros, and macore fruits, which were also afterwards eaten, to the extreme satisfaction of the Tongan stomachs.

The violoncello had its strings let down in the fray, and Sebastien Zorn had to tune it up again, after ascertaining that it had lost none of its qualities by reason of the incantations of the natives.

CHAPTER VI

IN leaving Tonga-Tabou, Floating Island steered north-west towards the Fiji archipelago, moving away from the tropic in the track of the sun, which was mounting towards the Equator. There was no need for haste. Two hundred leagues only separated it from the Fijian group, and Commodore Simcoe took it along at moderate speed.

The breeze was variable, but what mattered the breeze to this powerful concern? If, now and then, violent storms broke on this twenty-third parallel, the Pearl of the Pacific did not even dream of being anxious. The electricity which saturated the atmosphere was drawn off by the numerous conductors with which its buildings were provided. As to the rain, even in the torrents that the storm-clouds poured down, it was welcome. The park and the country grew verdant under it, rare as it was. Life passed under the most fortunate conditions, amid festivals, concerts, receptions. At this time, friendly communications between the sections were frequent, and it seemed as though nothing would threaten their safety in the future.

Cyrus Bikerstaff had no reason to repent of having given a passage to the New Hebrideans embarked at Captain Sarol's request. These natives endeavoured to make themselves useful. They set to work in the fields, as they had done at Tonga. Sarol and his Malays hardly left them during the day, and at night they returned to the two ports in which the municipality had given them quarters. No

complaint was made against them. Perhaps an opportunity offered for converting them. Up to then they had not adopted Christianity, like a large number of the New Hebrides population, despite the efforts of the Anglican and Catholic missionaries. The clergy of Floating Island had considered this, but the Governor would allow no attempt of such a nature.

These New Hebrideans are between twenty and forty years of age. Darker in hue than the Malays, although they are not so well built as the natives of Tonga or Samoa, they were apparently endowed with more endurance. The little money that they had earned in the service of the Maristes of Tonga-Tabou, they kept with great care, and did not attempt to spend in alcoholic drinks, which would not readily have been sold to them. Being free of all expense, they had probably never been so happy in their savage archipelago.

Thanks to Captain Sarol, these natives would unite with their compatriots, and connive at the work of destruction, the hour of which was approaching. Then all their native ferocity would appear. Were they not the descendants of the murderers who have so formidable a reputation among the people of this part of the Pacific?

Meanwhile, the Milliardites lived in the thought that nothing could compromise an existence which had been so logically provided for and so wisely organised. The quartette continued their successful career. People were never tired of hearing them or applauding them. The works of Mozart, Beethoven, Haydn, Mendelssohn were run through completely.

Besides the regular concerts at the casino, Mrs. Coverley gave musical evenings, which were largely attended. The King and Queen of Malecarlie many times honoured them with their presence. If the Tankerdons had not yet visited the mansion in the Fifteenth Avenue, at least Walter had become assiduous in his attendance at the concerts. It was certain that his marriage with Miss Coverley would come

off some day or other. It was talked about openly in the Starboardite and Larboardite drawing-rooms. Even the witnesses to the inevitable marriage were named. The only thing wanting was the announcement from the heads of the families. Would anything happen that would oblige Jem Tankerdon and Nat Coverley to make it ?

This circumstance, so impatiently expected, was soon about to take place. But at the cost of what danger, and how greatly the safety of Floating Island was menaced !

In the afternoon of the 16th of January, at about half-way between Tonga and Fiji, a ship was signalled in the south-east. It seemed to be heading for Starboard Harbour, and was apparently a steamer of some eight hundred tons. No flag floated from its peak, and none was hoisted when it was within a mile of the island.

The ship did not attempt to enter one of the harbours, but apparently was passing, and doubtless would soon be out of sight.

The night came, very dark and moonless. The sky was covered with lofty, fleecy clouds, which absorbed all the light and reflected none. There was no wind. The calm was absolute in sea and sky. The silence was profound amid the thick darkness.

About eleven o'clock came an atmospheric change. The weather became very stormy. The air was rent by lightning until midnight, and the growls of the thunder continued, without a drop of rain falling.

Perhaps these rumblings, due to some distant storm, prevented the customs officers on duty about the Stern Battery from hearing strange hissings and curious roarings, which troubled this part of the coast. These were not the hiss of the lightning or the rumbling of the thunder. The phenomenon, whatever it was, did not occur until between two and three o'clock in the morning.

Next day a new cause of uneasiness spread in the outer quarters of the town. The men engaged in watching the flocks pasturing in the country were seized with a sudden

panic and dispersed in all directions, some towards the ports and some towards the gate of Milliard City.

A serious fact was that fifty sheep had been half devoured during the night, and their remains were found in the vicinity of Stern Battery. A few dozen cows, hinds, bucks, in the enclosures of the park, and some twenty horses had met with the same fate.

No doubt these animals had been attacked by wild beasts. What wild beasts? Lions, tigers, leopards, hyænas? Was that improbable? Had any of these formidable carnivores ever appeared on Floating Island? Could it be possible for these animals to arrive by sea? Was the Pearl of the Pacific in the neighbourhood of the Indies, of Africa, of Malaysia, the former of which comprises these varieties of ferocious animals?

No! Floating Island was not near the mouth of the Amazon, or the mouth of the Nile, and yet, about seven o'clock in the morning, two women ran into the square of the town hall who had been pursued by an enormous alligator, which had regained the banks of the Serpentine River and disappeared in the water. At the same time, the agitation of the plants along the banks indicated that other saurians were struggling there at that very moment.

The effect of this incredible news can be judged. An hour afterwards the look-outs noticed several tigers, lions, and leopards bounding across the country. Several sheep running towards Prow Battery were attacked by two immense tigers. The domestic animals began to run about in all directions, terrified at the roar of the wild beasts. And so did the men whose occupations called them out into the fields in the morning. The first tram for Larboard Harbour had barely time to run into the siding. Three lions had pursued it, and in a hundred yards more would have reached it.

There was no doubt that during the night Floating Island had been invaded by a band of ferocious animals, and so would Milliard City if precautions were not immediately taken.

It was Athanase Dorémus who brought our artistes the news. The professor of dancing and deportment had gone out earlier than usual, and had not dared to return to his house. He had taken refuge in the casino, from which no human power could remove him.

"Come, now!" said Pinchinat. "Your lions and tigers and alligators are imaginary."

But he had to yield to the evidence. The municipality had given orders to shut the town gates and bar the entrance to the ports and the custom-house stations along the coast. At the same time the service of trams was suspended, and people were prohibited from venturing into the park or the country until the dangers of this inexplicable invasion had been removed.

Then at the moment the gates were being closed at the extremity of the First Avenue near the square of the observatory, a couple of tigers had bounded from fifty yards beyond with eyes aflame and mouths open. A few seconds more and these ferocious animals would have been through the gate.

At the side of the town hall the same precaution had been taken, and Milliard City had nothing to fear from an attack.

What an incident, what a subject for copy, what varied reports in the *Starboard Chronicle*, the *New Herald* and other journals of Floating Island!

Terror was at its height. Mansions and houses were barricaded. The shops closed their shutters. Not a door remained open. At the windows of the upper storys affrighted faces appeared. The only people in the streets were the detachments of militia under the orders of Colonel Stewart and the police under the command of their officers.

Cyrus Bikerstaff and his assistants, who had met at the earliest moment, remained on duty at the town hall. By the telegraph from the two ports, the batteries and the posts along the shore, the municipality received the most disquieting news. There were wild beasts almost everywhere, hundreds at least, said the telegrams, to which

perhaps fear had added a cipher too many. It was undoubtedly the case that a number of lions, tigers, panthers, and caymans were at large in the island.

What, then, had happened? Had a menagerie broken out of its cages and taken refuge on Floating Island? But whence had this menagerie come? What ship had brought it? Was it the steamer that had been seen the evening before? If so, where had this steamer come from? Had she communicated with the shore during the night? Had the animals swum ashore and landed on the low part of the coast near the mouth of Serpentine River? Had the ship sunk immediately afterwards? And yet, as far as the look-outs could see, as far as Commodore Simcoe's glasses could carry, there was not a fragment of wreckage on the surface of the sea, and Floating Island had hardly moved during the night! Besides, if this ship had foundered, why had not the crew taken refuge on the island as the carnivores had done?

The telephone from the town hall questioned the different posts on this subject, and the posts replied that there had been neither collision nor shipwreck. There could be no mistake in this matter, although the darkness had been profound. Evidently, of all the guesses this was the least likely.

"Mystery! mystery!" Yvernès continued to repeat.

He and his comrades were gathered at the casino, where Athanase Dorémus was sharing their early breakfast, which would be followed by their luncheon and their dinner at six o'clock.

"My word!" said Pinclinat, munching his chocolate cake, which he had soaked in the smoking basin. "I give up these dogs or wild beasts. Anyhow, let us eat, Dorémus, until we are eaten."

"Who knows?" replied Zorn. "Perhaps by lions, or tigers, or cannibals."

"I would rather have cannibals!" replied his Highness. "Everyone to his taste, eh?"

He laughed, this indefatigable joker, but the professor

of dancing and deportment did not laugh, and Milliard City, a prey to terror, had no cause for laughter.

At eight o'clock in the morning, the council of notables, convoked at the town hall, had all attended the Governor's summons. There was nobody in the avenues nor in the streets except the squads of militia and police going to the positions assigned to them.

The council, at which Cyrus Bikerstaff presided, immediately began its deliberations.

"Gentlemen," said the Governor, "you are acquainted with the cause of this well-justified panic which has seized on the people of Floating Island. During the night our island has been invaded by a band of carnivores and saurians. It is urgent that we proceed to the destruction of these animals, and we shall certainly do so. But the people must conform to the measures we decide upon. If traffic is still authorised in Milliard City, the gates of which are shut, it cannot be permitted in the park and in the country. Hence, until fresh orders, communications are forbidden between the town, the two ports, and the batteries."

These measures being approved, the council passed to the discussion of the means which would permit of the destruction of the formidable animals which infested Floating Island.

"Our militia and our sailors," continued the Governor, "are organising expeditions to the different points of the island. Those of you who are sportsmen we would like to join us, to direct their movements so as to prevent any possible catastrophe."

"Years ago," said Jem Tankerdon, "I had some shooting in India and in America, and it will not be my first attempt. I am ready, and my eldest son will accompany me."

"We thank the Honourable Jem Tankerdon," replied Cyrus Bikerstaff, "and for my part I will follow his example. At the same time as Colonel Stewart's militia, a squad of sailors will be in the field, under Commodore Simcoe's orders, and their ranks are open to you, gentlemen."

Nat Coverley made a similar proposition to that of Jem Tankerdon, and finally all the notables whose age allowed offered their services. Magazine rifles of long range were not wanting at Milliard City. There was little doubt that, thanks to everyone's devotion and courage, Floating Island would soon be cleared of this formidable band. But, as Cyrus Bikerstaff repeated, the main point was not to have to regret anyone's death.

"These wild beasts, of which we cannot estimate the number," he added, "must be destroyed as quickly as possible. To leave them time to acclimatise themselves, to multiply, would be to endanger the safety of our island."

"It is not likely," said one of the notables, "that there are many of these animals."

"Quite so. It could only come from some ship which was carrying a menagerie," replied the Governor, "some ship from India, from the Philippines, or the Sunda Islands, on account of some Hamburg house, which is noted for its trade in these animals. The animals may have escaped or been thrown overboard owing to their becoming unmanageable."

The principal market for wild beasts is at Hamburg, the current prices being two thousand francs for elephants, twenty-seven thousand for giraffes, twenty-five thousand for hippopotami, five thousand for lions, four thousand for tigers, two thousand for jaguars—good prices, as will be seen, which have a tendency to rise, while those for snakes are going down.

Cyrus Bikerstaff remarked :

"I think we have nothing to fear from the presence of boas, coral-snakes, rattle-snakes, najas, vipers, and other examples of that kind. Nevertheless, we will do all that is necessary to reassure the people on this subject. But we must not lose time, gentlemen, and, before inquiring into the cause of this invasion of wild beasts, let us destroy them. They are here, and they must not remain here."

Nothing could be more sensible, and it could not have been better put.

CHAPTER VII

The total destruction of the animals which had invaded Floating Island must be proceeded with. Not a single pair of these formidable beasts must escape, as the future safety of the island was in danger. This pair would multiply, and the people might just as well live in the forests of India or Africa.

And at the outset, contrary to what had been asked by certain families under their influence of terror, there was no reason why the population should take refuge on the steamers at the two ports, and escape from Floating Island. Besides, the ships were not large enough.

The Milliardites set to work without losing a moment. A few had not hesitated to propose extreme methods ; amongst others that of introducing the sea on to the island, of burning down the trees in the parks, so as to drown or burn all this vermin. But, in any case, the means would not be efficacious as regards the amphibians, and it would be better to proceed by means of well-organised shooting-parties.

This is what was done.

Captain Sarol, the Malays, and the New Hebrideans had offered their services, which had been eagerly accepted by the Governor. These gallant fellows were desirous of showing their gratitude to the Governor. In reality, Captain Sarol was afraid that this incident would interrupt his plans, that the Milliardites and their families would abandon Floating Island. That would oblige the management to go back direct to Madeleine Bay, and thus foil his intentions.

The quartette showed themselves equal to the circumstances and worthy of their nationality. It would not be said that four Frenchmen had not risked their lives when danger was to be incurred. They put themselves under the direction of Calistus Munbar, who, according to his account, had been in a worse plight before, and shrugged

his shoulders in sign of contempt for lions, tigers, panthers, and other inoffensive beasts ! Perhaps he had been a tamer, this grandson of Barnum, or at least a manager of a travelling menagerie ?

The hunt began that morning, and opened well.

During the first hour two crocodiles had the imprudence to venture out of Serpentine River, and, as we know, saurians, though formidable in their liquid element, are much less so on land owing to the difficulty they have in turning. Captain Sarol and his Malays attacked them with courage, and—not without one receiving a wound—cleared the park.

Meanwhile twelve more were observed, which doubtless constituted the band. These were animals of large size, measuring from four to five metres, and consequently very dangerous. As they had taken refuge under the water, the sailors stood ready to send them a few of their explosive bullets, which would shatter the hardest carapaces (horny skins).

On the other hand, the detachments of hunters went out over the country. One of the lions was killed by Jem Tankerdon, who had reason to say that this was not his first attempt, and who recovered his coolness and skill as an old hunter in the Far West. The beast was superb—one of those worth from five to six thousand francs. A steel slug had passed through his heart at the moment it bounded on the quartette, and Pinchinat affirmed that he felt the wind of its tail as it went by !

In the afternoon, during an attack in which one of the militia was bitten in the shoulder, the Governor brought down a lioness of remarkable beauty.

The day did not end before a couple of tigers had fallen under the bullets of Commodore Simcoe, at the head of a detachment of sailors, one of whom, seriously wounded by a claw, had to be taken to Starboard Harbour. According to report, these terrible felines appeared to be the most numerous of the carnivores landed on Floating Island.

At the fall of night, the wild beasts, on being resolutely pursued, had retired under the trees at Prow Battery, whence it was proposed to dislodge them at break of day.

From the evening to the morning frightful growls spread terror among the female and infant population of Milliard City.

At daybreak the hunt commenced as on the day before. At the Governor's orders, conformably to the advice of Commodore Simcoe, Colonel Stewart brought up his artillery against the carnivores so as to sweep their hiding-places. Two cannons from Starboard Harbour, working on the Hotchkiss system in firing charges of bullets, were brought into the vicinity of Prow Battery.

At this place the clumps of nettle-trees were traversed by the tramway which branched towards the observatory. It was under the shelter of these trees that a certain number of the wild beasts had passed the night. A few heads of lions and tigers with gleaming eyes appeared among the lower branches. The sailors, the militia, the hunters, led by Jem and Walter Tankerdon, Nat Coverley, and Hubley Harcourt, took up their position on the left of this clump, waiting for the rush of wild beasts which the discharge from the cannon did not kill on the spot.

At Commodore Simcoe's signal the two pieces of cannon were fired simultaneously. Formidable growls were heard in reply. There was no doubt many of the carnivores had been hit. The others (about twenty) rushed out, and, passing near the quartette, were saluted with a fusillade, which struck two mortally. At this moment an enormous tiger jumped on to the group, and Frascal was struck by so terrible a leap that he rolled for ten paces.

His comrades rushed to his help. They raised him, almost unconscious. But he almost immediately recovered. He had only received a shock. Ah ! what a shock !

Meanwhile the caymans were being pursued under the waters of the Serpentine River, but how could they be

got rid of with certainty? Fortunately, Hubley Harcourt thought of raising the sluices of the river, and it was possible to attack the saurians under the best conditions, not without success.

The only victim to be regretted was a magnificent dog belonging to Nat Coverley. Seized by an alligator, the poor animal was cut in two by a bite. But a dozen of these saurians had succumbed under the bullets of the militia, and it was possible that Floating Island was definitely delivered from these redoubtable reptiles.

On the whole it had been a good day. Six lions, eight tigers, five jaguars, nine panthers, male and female, were among the beasts slain.

The evening came, and the quartette, including Frascolin, recovered from his shock, had just sat down at the table in the restaurant.

"I should like to believe that we are at the end of our troubles," said Yvernès.

"Unless this steamer, like a second Noah's Ark, contained all the animals in creation," said Pinchinat.

This was not probable, and Athanase Dorémus felt himself sufficiently reassured to return to his house in the Twenty-fifth Avenue. There in the barricaded house he found his old servant in despair at the thought that nothing was left of her old master but a few shapeless fragments.

This night was tranquil enough. Only a few distant roars had been heard on the Larboard Harbour side. It was to be hoped that next day, by proceeding to a general hunt across the country, the destruction of these wild beasts would be complete.

The group of hunters met in the early morning. During the twenty-four hours, it need scarcely be said that Floating Island had remained stationary, all the machinery staff being engaged with the rest.

The squads, each comprising twenty men with magazine rifles, had orders to advance through the island. Colonel Stewart did not consider it advisable to use cannon against

the wild beasts, now they had dispersed. Thirteen tracked to the vicinity of Stern Battery fell to his gun. But he had to rescue, not without difficulty, two customs officers from the neighbouring post, who had been knocked down by a tiger and a panther, and had received serious wounds.

This last attack brought up to fifty-three the number of animals killed since the beginning of the day before.

It was four o'clock in the morning. Cyrus Bikerstaff and Commodore Simcoe, Jem Tankerdon and his son, Nat Coverley and the two assistants, escorted by a detachment of militia, were proceeding towards the town hall, where the council were awaiting the reports from the two ports and the two batteries.

At their approach, when they were within a hundred yards of the hall, loud shouts arose. A number of people, women and children, seized with a sudden panic, were running along First Avenue.

Immediately the Governor, Commodore Simcoe, and their companions rushed towards the square, the gate of which ought to have been shut. But by some inexplicable negligence this gate was open, and there could be no doubt that one of the wild beasts—the last perhaps—had entered by it.

Nat Coverley and Walter Tankerdon were the first to run into the square.

Suddenly, while he was within three yards of Nat Coverley, Walter Tankerdon was knocked down by an enormous tiger.

Nat Coverley, having no time to slip a cartridge into his gun, drew the hunting-knife at his belt, and jumped to the rescue of Walter at the moment the animal's claws struck the young man's shoulder.

Walter was saved, but the tiger turned and attacked Nat Coverley.

He stabbed the animal with his knife without reaching the heart, and fell under.

The tiger recoiled, his throat roaring, his jaws open, his tongue bleeding——

There was the report of a gun.

It was Jem Tankerdon who had fired.

There was a second report.

It was the bullet which had exploded in the tiger's body.

They raised Walter, his shoulder wounded.

As to Nat Coverley, if he was not hurt, he had at least been close to death.

He rose, and, advancing towards Jem Tankerdon, said in a solemn voice :

“ You have saved me—thanks ! ”

“ You have saved my son—thanks ! ” replied Jem Tankerdon.

And they shook hands in token of a reconciliation which might end in a sincere friendship.

Walter was immediately taken to the mansion in Nineteenth Avenue, where his family had taken refuge ; while Nat Coverley regained his house on the arm of Cyrus Bikerstaff.

We need not be astonished if next morning Mrs. Tankerdon visited Mrs. Coverley to express her thanks for the service rendered to Walter, and if Mrs. Coverley visited Mrs. Tankerdon to express her thanks for the service rendered Nat Coverley. Let us even say that Miss Coverley accompanied her mother, and was it not natural that both should ask how the young man was progressing ?

In fact, everything was for the best, and, rid of its formidable visitors, Floating Island could safely resume its voyage towards the Fijis.

CHAPTER VIII

“ **H**ow many did you say ? ” asked Pinchinat.

“ Two hundred and fifty-five, my friends,” replied Frascolin. “ Yes, there are two hundred and fifty-five islands and islets in the Fiji Archipelago.”

"And how does that interest us," replied Pinchinat, "if the Pearl of the Pacific does not make two hundred and fifty-five stoppages?"

"You will never learn geography!" proclaimed Frascolin.

"And you—you know too much," replied his Highness.

And that was always the sort of welcome the second violin received when he tried to instruct his stubborn comrades.

However, Sebastien Zorn, who listened more willingly, allowed himself to be taken before the map at the casino, on which the position was marked each day. It was easy to follow the itinerary of Floating Island since its departure from Madeleine Bay. This itinerary formed a sort of large S, of which the lower loop curved up to the Fiji group.

Frascolin showed the violoncellist this collection of islands, discovered by Tasman in 1643—an archipelago comprised between the sixteenth and twentieth parallels of south latitude, and between the hundred and seventy-fourth and hundred and seventy-ninth meridians of east longitudes.

"So we are going to take our cumbrous machine among those hundreds of pebbles scattered on the road?" observed Sebastien Zorn.

"Yes, my old string-fellow," replied Frascolin, "and if you look with attention——"

"And shut your mouth," added Pinchinat.

"Why?"

"Because the proverb says that the fly cannot enter a closed mouth!"

"Of what fly are you speaking?"

"The one that stings you whenever you want to break out against Floating Island!"

Sebastien Zorn shrugged his shoulders disdainfully, and turned to Frascolin.

"You were saying?"

"I was saying that to reach the two large islands of Viti-Levu and Vanua-Levu there are three passages which cross the eastern group, those of Nanuku, Lakemba, and Oneata."

“ To say nothing of the passage where you are smashed into a thousand pieces ! ” exclaimed Sebastien Zorn. “ That will be the end of it ! Is it possible to navigate such seas with such a town, and a large population in that town ? No, it is contrary to the laws of nature ! ”

“ The fly ! ” retorted Pinchinat. “ That is Zorn’s fly ; see it ! ”

In fact, the obstinate violoncellist was always full of these dismal prophecies, and made no attempt to control them.

In this part of the Pacific the first group of the Fijis forms quite a barrier to ships arriving from the East. But there were passages wide enough for Commodore Simcoe to venture to bring Floating Island through them besides those pointed out by Frascolin. Among these islands the most important are the two Levus, situated in the west, and Ono, Ngaloa, Kandavu, etc.

A sea is enclosed within their summits emerged from the depths of the ocean, the Koro Sea, and if this archipelago, discovered by Cook, visited by Bligh in 1789, by Wilson in 1792, is so minutely known, it is because the remarkable voyages of Dumont D’Urville in 1828 and in 1833, of the American Wilkes in 1839, of the English Erskine in 1853, and the *Herald* expedition, under Captain Durham of the British Navy, have enabled them to be charted with a precision that does honour to the map-makers.

Hence there was no hesitation on the part of Commodore Simcoe. Coming from the south-east, he entered the Voulanga passage, leaving to port the island of that name, in shape like a cut cake served on a coral dish. Next morning Floating Island entered the interior sea, which is protected against the ocean surges by substantial submarine chains.

It need hardly be said that all fears had not been allayed regarding the wild beasts. The Milliardites remained constantly on the alert. Constant expeditions were organised through the woods, fields, and waters. No trace of

wild beasts was discovered. No growling was heard by day or night

The most positive result was the complete reconciliation that had been effected between the two sections of the town. After the Coverley-Tankerdon affair, the Starboardite and Larboardite families visited each other, invited each other, received each other. Every evening there was a ball and concert at one of the chief notables', particularly at the mansion in Nineteenth Avenue and the mansion in the Fifteenth. The Quartette Party had more than they could do ; the enthusiasm they provoked did not diminish ; on the contrary, it increased.

At last the great news came one morning while Floating Island was beating with its powerful screws the tranquil surface of this Koro Sea. Jem Tankerdon had gone officially to the house of Nat Coverley and demanded the hand of Miss Di Coverley for his son Walter. And Nat Coverley had given Miss Coverley's hand to Walter Tankerdon, the son of Jem Tankerdon. The question of dowry had led to no difficulty. It would be two hundred millions for each of the young couple.

" They should have enough to live on—even in Europe," remarked Pinchinat, judiciously.

Felicitations reached both families from all parts. The Governor, Cyrus Bikerstaff, made no attempt to hide his extreme satisfaction. Thanks to this marriage, there would disappear all those causes of rivalry which had menaced the future of Floating Island. The King and Queen of Malecarlie were among the first to send their compliments and good wishes. Visiting-cards, printed in gold on aluminium, rained into the boxes at the mansions. The journals had paragraph after paragraph regarding the splendours in preparation—such as had never been seen at Milliard City, nor anywhere else on the globe. Cablegrams were sent to Paris with regard to the trousseau. The linen-drappers' shops, the establishments of the great dressmakers, the jewellers, received the most extraordinary

orders. A special steamer, starting from Marseilles, would come by Suez and the Indian Ocean, bringing these marvels of French industry. The wedding day was to be five weeks from then, on the 27th of February. The tradesmen of Milliard City had their share of profit in the affair. They had to furnish their contingent to this wedding outfit, and fortunes were to be made out of the orders they received from the nabobs of Floating Island.

There could be no doubt who would organise the entertainments. Calistus Munbar was evidently the man. His state of mind was indescribable when the marriage of Walter Tankerton and Miss Coverley was publicly announced. We know how he desired it, how he would have done everything to bring it about. It was the realisation of his dream, and, as the municipality intended to give him a free hand, rest assured that he would be at the height of his powers in organising an ultra-marvellous festival.

At the date chosen for the nuptial ceremony, Commodore Simcoe announced in a note to the newspapers that Floating Island would be in that part of the sea between Fiji and the New Hebrides. Before then it would stop at Viti-Levu, where the stay would last twelve days—the only one it was proposed to make amid this vast archipelago.

The voyage was delightful. Many whales played on the surface of the sea. With the thousand jets of water from their blowholes, it seemed like an immense basin of Neptune, in comparison with which that of Versailles was but a child's toy, as Yvernès said. But also in hundreds appeared enormous sharks, escorting Floating Island as if they were following a ship under way.

This portion of the Pacific is the boundary of Polynesia, which here is bordered by Melanesia, in which the group of the New Hebrides is situated.¹ It is cut by the hundred

¹ These positions are according to the French charts, the zero meridian of which passes through Paris—a meridian which was generally adopted at this period.

and eightieth degree of longitude—the conventional line which forms the boundary between the two parts of this immense ocean. When they reach this meridian, sailors coming from the east omit a day from their calendar, and, inversely, those coming from the west add one. Without this precaution there would be no concordance of dates. The preceding year Floating Island had not had to make this change, for it had not advanced to the westward beyond this meridian. But this time it had to conform to the rule, and, as it came from the east, the 22nd of January had to become the 23rd.

Of the two hundred and fifty-five islands of which the archipelago of Fiji is composed, only a hundred are inhabited. The total population does not exceed a hundred and twenty-eight thousand inhabitants—a very slight density for an extent of twenty-one thousand square kilometres.

Of these islets, mere fragments of atolls, or summits of submarine mountains, fringed with coral, there are none that measure more than a hundred and fifty superficial kilometres. This political domain England has annexed to her colonial empire. If the Fijians have at length decided to submit to a British Protectorate, it is because they were in 1859 threatened with a Tongan invasion, which was checked by the United Kingdom. The archipelago is divided into seventeen districts, administered by the native chiefs, more or less related to the royal family of the last king, Thakumbau.

“Is it the consequence of the English system,” asked Commodore Simcoe, who was talking on this subject with Frascolin, “that the Fijis will be like Tasmania? I do not know, but it is certain that the natives are disappearing. The colony does not prosper, nor does the population increase, as is shown by the numerical inferiority of the women compared to the men.”

“That is a sign of the approaching extinction of a race,” said Frascolin; “and in Europe there are already a few States which this inferiority menaces.”

"Here," said the commodore, "the natives are really but serfs, like the natives of the neighbouring islands, recruited by the planters for the work of clearing the ground. Diseases decimate them, and in 1875 smallpox swept off more than thirty thousand. But it is an admirable country, as you can see. If the temperature is high in the interior of the islands, it is at least moderate on the shore. The country is very fertile in fruits and vegetables, in trees—coconut-trees, bananas, etc. There is little more than the trouble of gathering the yams and taros, and the nourishing sap of the palm, which produces sago."

"Sago!" exclaimed Frascolin. "What a remembrance of our *Swiss Family Robinson*!"

"As to the pigs and the fowls," said the Commodore, "these animals have multiplied since their importation with extraordinary prolificness. They furnish all the means of subsistence. Unfortunately, the natives are inclined to indolence, although they are intelligent and witty."

"And as they have high spirits——" said Frascolin.

"The children amuse themselves," replied Commodore Simcoe.

In fact, all these natives, Polynesians, Melanesians, and others, are nothing but children.

In approaching Viti-Levu, Floating Island sighted many intermediate islands, such as Vanu-Vatu, Moala, Ngau, without stopping at them.

From all parts came scudding along the coast flotillas of those long outrigger canoes with intersecting bamboos, which serve to maintain the equilibrium of the vessel and carry the cargo. They were gracefully handled, but did not seek to enter Starboard Harbour or Larboard Harbour. Probably they would not have been allowed to on account of the evil reputation of the Fijians. These natives have embraced Christianity, it is true. Since the European missionaries established themselves at Lecumba, in 1835,

they have nearly all become Wesleyans, mingled with a few thousand Catholics. But previously they were so addicted to the practice of cannibalism that perhaps they have not yet quite lost the taste for human flesh. Besides, it is a matter of religion. Their gods love blood. Kindness is regarded among these people as weakness, and even sin. To eat an enemy is to do him honour. They cook the man they despise, but they do not eat him. Children furnished the principal joints at their festivities, and the time is not so distant when King Thakumbau delighted to sit under a tree, from every branch of which hung a human limb reserved for the royal table. Sometimes a tribe—as happened to the Nulocas in Viti-Levu near Namosi—was devoured completely except a few females, one of whom died in 1880.

Decidedly, if Pinchinat did not meet on one of these islands the grandchildren of cannibals retaining the customs of their ancestors, he would have to give up asking for local colour in these archipelagoes of the Pacific.

The western group of the Fijis comprises two large islands, Viti-Levu and Vanua-Levu, and two smaller islands, Kandavu and Taviuni. More to the north-west lie the Wassava Islands and the Ronde Passage, by which Commodore Simcoe would make his way out towards the New Hebrides.

On the afternoon of the 25th of January the heights of Viti-Levu appeared on the horizon. This mountainous island is the largest of the archipelago, being a third larger than Corsica. Its peaks run from twelve to fifteen hundred metres above the level of the sea. These are volcanoes, extinct, or rather dormant, and apt to be disagreeable when they wake up. Viti-Levu has an area of six thousand four hundred and seventy-five square kilometres, and is connected with Vanua-Levu, its neighbour to the north, by a submarine barrier of reefs, which were doubtless above water when the land was formed.

Above this barrier Floating Island could venture without danger. To the north of Viti-Levu the depths are estimated at from four to five hundred metres, and to the south from five hundred metres to two thousand.

Formerly the capital of the archipelago was Levuka, in the Island of Ovalu, to the east of Viti-Levu. Perhaps the offices founded by English houses are still more important than those of Suva, the present capital, in the island of Viti-Levu. But the harbour of the latter has many advantages, being situated at the south-east extremity of the island, between two deltas. The port of call used by steamers in the Fijis occupies the head of Ngala Bay, at the south of the island of Kandavu, the position of which is the nearest to New Zealand, Australia, and the French islands of New Caledonia and the Loyalties.

Floating Island stopped at the mouth of Suva harbour. The formalities were completed the same day and free pratique was accorded. As the visit would be a source of profit to both colonists and natives, the Milliardites were sure of an excellent welcome, in which there was probably more interest than sympathy.

Next day, the 26th of January, the tradesmen of Floating Island who had purchases to make or sales to effect went ashore early in the morning. The tourists, and among them our Parisians, were almost as early. Although Pinchinat and Yvernès made fun of Frascaolin—the distinguished pupil of Commodore Simcoe—concerning his ethnogeographical studies, they none the less availed themselves of his knowledge. To the questions of his comrades on the inhabitants of Viti-Levu, their customs, their practices, the replies of the second 'violin were always instructive. Sebastien Zorn did not disdain to refer to him occasionally, and when Pinchinat learnt that these regions were not long ago the principal theatre of cannibalism, he could not restrain a sigh as he said :

“ Yes—but we shall arrive too late, and you will see that these Fijians, enervated by civilisation, have

come down to fricassed fowl and pigs' feet *à la Sainte Meneshould !* ”

“ Cannibal ! ” exclaimed Frascolin, “ you deserve to have figured on the table of King Thakumbau. Ah ! ah ! *Entrecôte de Pinchinat à la Bordelaise.* ”

“ Come,” said Sebastien Zorn, “ if we are to waste our time in these useless recriminations——”

“ We shall make no progress by a forward movement,” said Pinchinat. “ That is the sort of phrase you like, isn't it, my old violoncelluloidist ? Well, forward, march ! ”

The town of Suva, built on the right of a little bay, has its buildings scattered on the back of a green hill. It has quays for mooring ships, roads furnished with plank side-ways, like the beaches of our large bathing-places. The wooden houses have but one floor ; a few of them have two floors, but all are cheerful and fresh-looking. In the suburbs the native huts display their gable-ends raised into horns and ornamented with shells. The roofs are substantial, to resist the winter rains from May to October, which fall in torrents. In fact, in March 1871, according to Frascolin, who was very strong on statistics, Mbua, situated in the east of the island, had a rainfall in one day of thirty-eight centimetres.

Viti-Levu, like the other islands of the archipelago, is subject to great differences in climate, and the vegetation differs on each shore. On the side exposed to the south-east trades the atmosphere is humid, and magnificent forests cover the soil. On the other side are immense savannahs suitable for cultivation. But it is noticeable that certain trees tend to disappear, among others the sandalwood, almost entirely exhausted, and also the *dakua*, a pine peculiar to Fiji.

However, in their promenades, the quartette discovered that the flora of the island is of tropical luxuriance. Everywhere are forests of coconut-trees and palms, their trunks covered with parasitic orchids, clumps of *casuarinas*, *pandanus*, *acacias*, tree-ferns, and in the marshy parts

numbers of mangrove-trees with roots winding out of the ground. But the cultivation of cotton and tea has not given the results the climate had led people to expect. The soil of Viti-Levu, as in the rest of the group, is clayey and yellowish in colour, formed of volcanic cinders to which decomposition has given the productive qualities.

The fauna is not more varied than in other parts of the Pacific ; some forty species of birds, acclimatised parrots and canaries, bats, rats in legions, reptiles of non-venomous species, much appreciated by the natives from a commissariat point of view, lizards, and horrible cockroaches of cannibalistic voracity. But of wild beasts there were none, which provoked this sally from Pinchinat.

“ Our Governor, Cyrus Bikerstaff, should have kept a few lions, tigers, panthers, crocodiles, and landed these useful carnivores in the Fijis. It would be a curious experiment in acclimatisation.”

The natives of mixed Polynesian and Melanesian race, still yield some fine examples, less remarkable, however, than those of Samoa and the Marquesas. The men are copper-coloured, almost black, their heads covered with a thick mass of hair, among them being a number of half-breeds, and they are tall and strong. Their clothing is rudimentary enough, oftenest being but mere cotton drawers made of the native fabric called masi, produced by a species of mulberry-tree, which also produces paper. In its first stage this fabric is quite white, but the Fijians know how to dye it and stripe it, and it is in demand in all the archipelagoes of the Eastern Pacific. It must be added that the men do not disdain to clothe themselves, when opportunity offers, in old European garments sent out from the old-clothes stores of the United Kingdom or Germany. A fine field for joking was thus offered to a Parisian, when he saw these Fijians clad in worn-out trousers, a great-coat the worse for age, and even a black coat, which, after many phases of decadence, had come to end its days on the back of a native of Viti-Levu.

“ You might make a romance out of one of those coats ! ” observed Yvernès.

“ A romance that might end in a waistcoat ! ” replied Pinchinat.

The women have the short petticoat and masi jacket, which they wear in a fashion more or less decent. They are well built, and with the attractions of youth some of them might pass for pretty. But what a detestable habit they have—as have also the men—in plastering their hair with lime so as to form a sort of calcareous hat to preserve themselves against sunstroke. And then they smoke as much as their husbands and brothers the tobacco of the country, which has the odour of burning hay, and when the cigarette is not between their teeth it is stuck into the lobe of their ears in the place where in Europe you have the pendants of diamonds and pearls.

In general these women are reduced to the condition of slaves, doing the hardest of household work, and the time is not distant when, after toiling to encourage the indolence of their husband, they are strangled on his tomb.

On many occasions, during the three days they devoted to their excursions round Suva, our tourists endeavoured to visit the native huts. They were repulsed, not by the inhospitality of their owners, but by the abominable odour that was given forth. All these natives, rubbed over with coconut-oil, live in promiscuity with the pigs, the fowls, the dogs, the cats, in evil-smelling huts, the choking light being obtained by burning the resinous gum of the dammana. No ! They could not stop there. And if they had taken their places at the Fijian fireside, would they not, at the risk of failing in politeness, have had to steep their lips in the bowl of kava, the special Fijian drink ? Though extracted from the dried bark of the pepper-plant, this pimentoed kava is displeasing to European palates owing to the way in which it is prepared. Is it not enough to provoke the most insurmountable repugnance ? They do not grind their pepper, they chew it, they triturate it

through their teeth, then they spit it out into the water in a vase, and offer it you with a savage insistence that will hardly bear refusal. And nothing remains but to thank them by pronouncing these words, which are current in the archipelago, "*E mana ndina*," otherwise "*amen*."

Do not let us forget the cockroaches which swarm in the huts, the white ants which devastate them, and mosquitoes—mosquitoes in thousands—that can be seen on the walls, on the ground, on the clothes in innumerable bands.

CHAPTER IX

While our artistes were passing their time walking about, and taking note of the customs of the archipelago, a few notables of Floating Island had not disdained to enter into communication with the native authorities of the archipelago. The "papalangis" as strangers are called in these islands, had no fear of being badly received.

During the stay the Tankerdon and Coverley families organised excursions in the neighbourhood of Suva, and in the forests which clothe its heights up to their topmost peaks.

And with regard to this, the superintendent made a very just observation to his friends the quartette.

"If our Milliardites are so fond of these excursions into high altitudes, it shows that Floating Island is not sufficiently undulating. It is too flat, too uniform. But I hope that some day we shall have an artificial mountain, rivalling the loftiest summits of the Pacific. Meanwhile, every time they have an opportunity our citizens are eager to ascend a few hundred feet, and breathe the pure and refreshing air of space. It meets a want of human nature."

"Very well," said Pinchinat. "When you build your mountain in sheet steel or aluminium, do not forget to put a nice volcano inside it—a volcano with plenty of fireworks."

"And why, Mr. Facetious?" replied Calistus Munbar.

"And why not?" replied his Highness.

As a matter of course Walter Tankerdon and Miss Coverley took part in these excursions arm-in-arm.

The curiosities of the capital of Viti-Levu were visited, their "mbure-kalou," the temples of the spirits, and also the place used for the political assemblies. These constructions, raised on a base of dry stones, are composed of plaited bamboos, of beams covered with a sort of vegetable lace-work, of laths ingeniously arranged to support the thatch of the roofs. The tourists went to see the hospital, the botanic garden, laid out like an amphitheatre, behind the town. These walks often lasted until late, and the tourists returned, lantern in hand, as in the good old times.

And Captain Sarol and his Malays and the New Hebrideans embarked at Samoa. What were they doing during this stay? Nothing out of their usual way. They did not go ashore, knowing Viti-Levu and its neighbours, some by having frequented these parts during their coasting cruises, others by having worked there for the planters. They very much preferred to remain on Floating Island, exploring it in every part—town, harbours, park, country and batteries. A few weeks more, and, thanks to the kindness of the company, thanks to Governor Cyrus Bikerstaff, these fellows would land in their own country, after a sojourn of five months on Floating Island.

Occasionally our artists talked to Sarol, who was very intelligent, and spoke English fluently. Sarol spoke to them enthusiastically of the New Hebrides, of the natives of the group, of their way of living, their cooking—which interested his Highness particularly. The secret ambition of Pinchinat was to discover some new dish, the recipe for which he could communicate to the gastronomic societies of Old Europe.

On the 30th of January, Sebastien Zorn and his comrades, at whose disposal the Governor put one of the electric launches of Starboard Harbour, went away with the intention of ascending the course of the Rewa, one of the principal rivers of the island. The captain of the launch, an

engineer, and two sailors were on board, with a Fijian pilot. In vain had Athanase Dorémus been asked to join the excursionists ; the feeling of curiosity was extinct in the professor of dancing and deportment. And then, during his absence, a pupil might apply, and he would therefore rather not leave the dancing-room.

At six o'clock in the morning, well armed, and furnished with a few provisions, for they would not return until the evening, the launch left the Bay of Suva, and ran along the coast to the bay of the Rewa.

Not only reefs, but sharks showed themselves in great numbers in these parts, and as much care had to be taken of one as of the other.

"Phew !" said Pinchinat. "Your sharks are only salt-water cannibals ! I'll undertake to say that those fellows have lost the taste for human flesh."

"Do not trust them," replied the pilot, "any more than you would trust the Fijians of the interior."

Pinchinat contented himself with shrugging his shoulders. He was getting weary of these pretended cannibals, who did not even become cannibalistic on festival days !

The pilot was thoroughly acquainted with the bay and the course of the Rewa. Up this important river, called also the Wai-Levu, the tide is apparent for a distance of forty-five kilometres, and vessels can go up as far as eighty.

The width of the Rewa exceeds two hundred yards at its mouth. It runs between sandy banks, low on the left, steep on the right, from which the banana and coconut-trees rise luxuriantly from a wide stretch of verdure. Its name is Rewa-Rewa, conformably to that duplication of the word which is almost general among the people of the Pacific. And, as Yvernès remarked, is this not an imitation of the childish pronunciation one finds in such words as *papa*, *dada*, *bonbon*, etc. ? In fact, these natives have barely emerged from childhood.

After the circuit of the delta, the launch ran past the village of Kamba, half hidden in its basket of flowers. It

did not stop here, so as to lose nothing of the flood-tide, nor did it stop at the village of Naitasiri. Besides, at this epoch the village had been declared "taboo," with its houses, its trees, its inhabitants, up to the waters of the Rewa which bathed its beach. The natives would permit no one to set foot in it.

As the excursionists ran along in front of Naitasiri, the pilot pointed out a tall tree, a tavalala, which rose in an angle of the bank.

"And what is there remarkable about that tree?" asked Frascolin.

"Nothing," replied the pilot, "except that its bark is gashed from its roots to the fork. These indicate the number of human bodies that were cooked there and then eaten."

Like the notches of a baker on his sticks," observed Pinchinat, shrugging his shoulders as a sign of incredulity.

But he was wrong. The Fiji Islands are pre-eminently the country of cannibalism, and, it is necessary to repeat it, these practices are not entirely extinct. The love of good living will keep them alive for a long time yet among the tribes of the interior. Yes, the love of good living ! for, in the opinion of the Fijians, nothing is comparable in taste and delicacy to human flesh, which is much superior to beef. If the pilot were to be believed, there was a certain chief, Ra-Undrenudu, who set up stones on his estate, and when he died these stones numbered eight hundred and twenty-two.

"And do you know what these stones indicated?"

"It is impossible for us to guess," said Yvernès, "even if we apply all our intelligence as instrumentalists!"

"They showed the number of human bodies this chief had devoured."

"By himself?"

"By himself."

"He was a large eater!" replied Pinchinat, whose opinion was made up regarding these "Fijian fairy-tales."

About eleven o'clock a bell rang on the right bank.

The village of Naililii, composed of a few straw huts, appeared among the foliage, under the shade of coconut-trees and banana-trees. A Catholic mission is established in this village. Could the tourists stop an hour and shake hands with the missionary, a compatriot? The pilot saw no reason why they should not, and the launch was moored to the root of a tree.

Sebastien Zorn and his comrades landed, and they had not walked for two minutes before they met with the Superior of the mission.

He was a man of about fifty, of pleasant face and energetic figure. Happy to be able to welcome Frenchmen, he took them to his hut in the village, which comprises about a hundred Fijians. He insisted that his guests must accept some of the refreshments of the country. He assured them that this did not mean the repugnant kava, but a sort of drink, or rather soup, of agreeable flavour, obtained by cooking the cyrenæ, molluscs very abundant on the beaches of the Rewa.

This missionary admitted that it was a hard task to withdraw his faithful from the lord of "bukalo," that is to say, human flesh. "And as you are going towards the interior, my dear guests," added he, "be prudent, and keep on your guard."

"Do you hear that, Pinchinat?" said Sebastien Zorn.

They left a little before the noonday angelus sounded from the bell of the little church. As they proceeded the launch met several canoes laden with bananas. This is the local currency in which the natives pay their taxes. The river banks continued to be bordered with laurels, acacias, citron-trees, and cactus with blood-red flowers. Over them the banana and coconut-trees raise their lofty branches laden with bunches, and all this verdure stretches back to the mountains dominated by the peak of Mbugge-Levu.

Among these masses of foliage are one or two European factories, little in keeping with the savage nature of the

country. These are sugar factories, fitted up with the best modern machinery, and their products, as a traveller, M. Verschnur, says, "can advantageously bear comparison with the sugars of the Antilles and other colonies."

About one o'clock the launch reached the end of its voyage on the Rewa. In two hours the ebb would begin, and it was as well to take advantage of it for the return journey. The run down would not take long, as the tide ebbs quickly. The excursionists ought to be back on Floating Island before ten o'clock in the evening.

A little time could be spent here, and it could not be better employed than in visiting the village of Tampoo, the first huts of which were visible about half a mile away.

It was arranged that the engineer and two sailors should remain in charge of the launch, while the pilot piloted his passengers to the village, where the ancient customs were preserved in all their Fijian purity. In this part of the island the missionaries have wasted their trouble and their sermons. There still reign the sorcerers; there still are worked the sorceries, particularly those bearing the complicated name of "Vaka-Ndran-in-Kan-Tacka," that is to say, "incantation by leaves." Here the people worship the Katvavous, the gods whose existence had no beginning, and will have no end, and who do not disdain special sacrifices that the governor-general is powerless to prevent, and even to punish.

Perhaps it would have been more prudent not to venture among these suspicious tribes. But our artistes, quite Parisian in their curiosity, insisted on it, and the pilot consented to accompany them, advising them not to get far away from each other.

On entering Tampoo, which consisted of a hundred straw huts, they met some women, real savages, wearing but cotton cloth knotted round their waists; they betrayed no surprise at the sight of the strangers. They were occupied in the preparation of curcuma, made of roots preserved in trenches previously lined with grasses and banana

leaves. These roots were taken out, grilled, scraped, pressed into baskets lined with ferns, and the juice which ran out was poured into bamboos. This juice serves as food and pomatum, and in both respects is very widely used.

The party entered the village. There was no welcome on the part of the natives, who were in no hurry to greet the visitors, or to offer them hospitality. The exterior of the huts was not attractive. Considering the odour that issued from them in which that of rancid coco-nut oil prevailed, the quartette congratulated themselves that the laws of hospitality were not much honoured here.

However, when they arrived before the habitation of the chief—a Fijian of tall stature, and stern and ferocious look—he advanced towards them amid an escort of natives. His woolly hair was white with lime. He had assumed his ceremonial garb, a striped shirt, a belt round his body, an old carpet slipper on his left foot, and—how did Pinchinat restrain a burst of laughter?—an old blue coat with gold buttons, patched in many places, and its unequal tails flapping against his calves. As he advanced towards the papalangis, the chief stumbled against a stump, lost his equilibrium, and fell to the ground.

Immediately, conformably to the etiquette of the “*bale muri*,” the whole of the escort fell down flat “in order to take their share in the absurdity of this fall.”

This was explained by the pilot, and Pinchinat approved of the formality as being no more ridiculous than many others in use in European courts—at least in his opinion.

When the natives had got up, the chief and the pilot exchanged a few sentences in Fijian, of which the quartette did not understand a word. These sentences, translated by the pilot, were merely asking why the strangers had come to the village of Tampoo. The reply being that they wished to visit the village and take a walk round the neighbourhood, permission was given, after an exchange of several questions and replies.

The chief, however, manifested neither pleasure nor

displeasure at this arrival of tourists in Tampoo, and at a sign from him the natives returned to their huts.

"After all," said Pinchinat, "they do not seem to be so very bad."

"That is no reason for our not being careful," replied Frascolin.

For an hour our artistes walked about the village without being interfered with by the natives. The chief in his blue coat had gone into his hut, and it was obvious that the visit was treated as a matter of indifference.

After moving about Tampoo without any hut being opened to welcome them, Sebastien Zorn, Yvernès, Pinchinat, Frascolin, and the pilot strolled towards the ruins of some temples, like abandoned huts, which were not far from the dwelling of one of the sorcerers of the place.

This sorcerer, who was seated at his door, gave them anything but an encouraging look, and his gestures appeared to indicate that he certainly was not giving them a blessing.

Frascolin tried to enter into conversation with him through the pilot; but he assumed so repulsive a look, and so threatening an attitude, that they had to abandon any hope of a word from this Fijian porcupine.

Meanwhile, in spite of the advice which had been given him, Pinchinat had strolled off through a thick clump of bananas on the side of a hill.

When Sebastien Zorn, Yvernès, and Frascolin had been rebuffed by the sorcerer's surliness, and were preparing to leave Tampoo, their comrade was out of sight. The time had come for them to get back to the launch. The tide had begun to ebb, and there were none too many hours for them to run down the Rewa.

Frascolin, uneasy at not seeing Pinchinat, hailed him in a loud voice.

There was no reply.

"Where is he, then?" asked Sebastien Zorn.

"I do not know," replied Yvernès.

"Did any of you see him go away?" asked the pilot.

No one had seen him.

"Probably he has gone back to the launch by the footpath from the village," said Frascaolin.

"Then he was wrong," said the pilot. "But let us lose no time, and rejoin him."

They left, not without considerable anxiety. As they went through Tampoo the pilot remarked that not a Fijian was visible. All the doors of the huts were shut. There was no gathering in front of the chief's house. The women who were occupied in the preparation of curcuma had disappeared. It seemed that the village had been abandoned for some time.

The party hurried along. Frequently they shouted for the absent one, and the absent one did not reply. Had he not, then, got back to the shore where the launch was moored? Or was the launch no longer then in charge of the engineer and two sailors?

There remained but a few hundred yards to traverse. They hurried along, and as soon as they were through the trees saw the launch and the three men at their posts.

"Our comrade?" shouted Frascaolin.

"Is he not with you?" replied the engineer.

"No—not for the last half-hour."

"Has he not come back?" asked Yvernès.

"No."

What had become of him? The pilot did not conceal his extreme uneasiness.

"We must return to the village," said Sebastien Zorn.
"We cannot abandon Pinchinat."

The launch was left in charge of one of the sailors, although it was dangerous to do so. But it was better to return to Tampoo in force and well armed this time. If they had to search all the huts, they would not leave the village, they would not return to Floating Island until they had found Pinchinat.

They went back along the road to Tampoo. The same solitude in the village and its surroundings. Where had the population gone? Not a sound was heard in the streets, and the huts were empty.

There could be no doubt as to what had happened. Pinchinat had ventured into the banana wood; he had been seized and dragged away—where? As to the fate reserved for him by these cannibals whom he derided, it was only too easy to imagine it! A search in the environs of Tampoo produced no result. How could you find a track through this forest region, which is known only to the Fijians? Besides, was it not to be feared that they would try to capture the launch, guarded only by a single sailor? If that misfortune happened, all hope of rescuing Pinchinat was at an end, the safety of his companions would be endangered.

The despair of Frascolin, Yvernès, and Sebastien Zorn was indescribable. What could be done? The pilot and the engineer did not know what to do.

Frascolin, who had preserved his coolness, said:

“We must return to Floating Island.”

“Without our comrade?” asked Yvernès.

“Do you think so?” added Sebastien Zorn.

“I do not see what else to do,” replied Frascolin. “The Governor of Floating Island should be informed; the authorities of Viti-Levu should be communicated with and asked to take action——”

“Yes; let us go!” said the pilot, “and if we are to take advantage of the tide, we have not a minute to lose.”

“It is the only way of saving Pinchinat,” said Frascolin, “if it is not too late.”

The only way, in fact.

They left Tampoo, fearing that they might not find the launch at her post. In vain the name of Pinchinat was shouted by all! And if they had been less excited they might have seen among the bushes a few savage Fijians watching their departure.

The launch had not been interfered with. The sailor had seen no one prowling on the banks of the Rewa.

It was with inexpressible sadness that Sebastien Zorn, Frascolin, and Yvernès decided to take their places in the boat. They hesitated ; they shouted again. But they had to go, as Frascolin said, and they were right in doing so.

The engineer set the dynamos going, and the launch with the tide under her flew down the Rewa at prodigious speed.

At six o'clock the western point of the delta was rounded, and half an hour afterwards they were alongside the pier at Starboard Harbour.

In a quarter of an hour Frascolin and his two comrades had by means of the tram reached Milliard City, and were at the town hall.

As soon as he had heard what had occurred, Cyrus Bikerstaff started for Suva, and there he asked for an interview with the governor-general of the archipelago, which was granted him.

When this official learned what had passed at Tampoo, he admitted that it was a very serious matter. This Frenchman was in the hands of one of the tribes of the interior who evaded all authority.

"Unfortunately," he added, "we cannot do anything before to-morrow. Our boats cannot get up to Tampoo against the tide. Besides, it is indispensable for us to go in force, and the best way would be to go through the bush."

"Quite so," replied Cyrus Bikerstaff ; "but it is not to-morrow, but to-day—this very moment—that we should start."

"I have not the necessary men at my disposal," said the Governor.

"We have them, sir," replied Cyrus Bikerstaff. "Under the orders of one of your officers who knows the country——"

"Very well, sir, you can start at once."

Half an hour afterwards, a hundred men, sailors and

militia, landed at Suva, under the orders of Commodore Simcoe, who had asked to take the command of the expedition. The superintendent, Sebastien Zorn, Yvernès, Frascaolin, were at his side. A detachment of the Viti-Levu police went with them.

The expedition started into the bush under the guidance of the pilot, who knew these difficult regions of the interior. They went the shortest way, and at a rapid rate, so as to reach Tamboo as quickly as possible.

It was not necessary to go as far as the village. About an hour after midnight orders were given for the column to halt.

In the deepest part of an almost impenetrable thicket the glare of a fire was noticed. Doubtless the natives of Tampoo were gathered here, the village being within half an hour's march to the east.

Commodore Simcoe, the pilot, Calistus Munbar, the three Parisians, went on in front.

They had not gone a hundred yards before they stopped.

In the light of the fire, surrounded by a tumultuous crowd of men and women, Pinchinat, half naked, was tied to a tree, and the Fijian chief was advancing towards him, axe in hand.

"Forward ! Forward !" shouted Commodore Simcoe to his sailors and militia.

Sudden surprise and well-grounded terror on the part of the natives, on whom the detachment spared neither fire nor steel. In a moment the place was deserted, and the whole band had dispersed under the trees.

Pinchinat, detached from the tree, fell into the arms of his friend Frascaolin.

How can we describe the joy of these artistes, these brothers—in which were mingled a few tears, and also well-merited reproaches.

"But, you wretch," said the violoncellist, "what possessed you to go away from us ?"

"Wretch as much as you like, my old Sebastien," replied Pinchinat, "but do not sit upon an alto as poorly

clothed as I am at this moment. Pass me my clothes, so that I can present myself before the authorities in a more suitable fashion."

His clothes were found at the foot of a tree, and he put them on with the greatest coolness imaginable. Then when he was "presentable" he went to shake hands with the commodore and superintendent.

"Well," said Calistus Munbar, "do you now believe in the cannibalism of the Fijians?"

CHAPTER X

THE departure of Floating Island was fixed for the 2nd of February. The day before the excursions ended, the different tourists returned to Milliard City. The Pinchinat affair created a great sensation. All the Pearl of the Pacific was interested in his Highness, for the Concert Party were held in universal esteem. The council of notables accorded its entire approbation to the energetic conduct of the governor, Cyrus Bikerstaff. The newspapers warmly congratulated him. Pinchinat became the celebrity of the day. Could you have an alto terminating his artistic career in the stomach of a Fijian? It was cheerfully admitted that the natives of Viti-Levu had not absolutely renounced their cannibalistic tastes. After all, human flesh was so good, according to them, and this fellow, Pinchinat, was so appetising!

Floating Island started at daybreak and moved off towards the New Hebrides. This would take it about twelve degrees or two hundred leagues out of the way; but it could not be avoided if Captain Sarol and his companions were to be landed in the New Hebrides. No one regretted it, however. Everybody was glad to be of service to these brave fellows who had shown so much courage in the proceedings against the wild beasts. And they appeared to be so satisfied at being taken home in this way after such a long absence! Added to which it would be an

opportunity of visiting a group with which the Milliardites were not yet acquainted.

The voyage proceeded with intentional slowness. It was in these regions between the Fijis and the New Hebrides that the steamer from Marseilles chartered by the Tankerdon and Coverley families was to meet Floating Island.

The marriage of Walter and Miss Coverley was more than ever the subject of general interest. How could anything else be thought of? Calistus Munbar had not a minute to himself. He was preparing and organising the different elements of a festival that would make its mark in the annals of Floating Island. That he grew thin over the task need surprise nobody.

Under these conditions, then, the marriage of Walter Tankerdon and Miss Coverley would take place. The two families would be united by pecuniary interests, which in America, as elsewhere, form the strongest social ties. What assurance of prosperity for the citizens of Floating Island ! Now it belonged to the Milliardites, it would seem more independent than ever, more mistress of its destinies. Before, a cable had attached it to Madeleine Bay, in the United States—now the cable was broken !

At present everything was flourishing.

Is it necessary to insist on the happiness of the parties in question, to express the inexpressible, to depict the happiness that radiated around them ? What appeared but a marriage of policy was really a love match. Both Walter and Di loved each other with an affection into which interest in no way entered. They both had the qualities which would assure them the happiest of lives. This Walter had a soul of gold, and Miss Di's was of the same metal—figuratively speaking, be it understood, and not in the sense that their millions might justify. They were made for one another, and never was this somewhat hackneyed phrase more strictly true. They counted the hours, which separated them from this longed-for date of the 27th of February. They regretted one thing, that

Floating Island did not move towards the hundred and eightieth meridian, when, coming from the west, it would have to eliminate twenty-four hours from its calendar. Their happiness might be advanced a day. No ! It was in sight of the New Hebrides that the ceremony was to take place, and all they could do was to resign themselves to it.

But the ship laden with all the marvels of Europe had not yet arrived. Here was a wealth of things with which they would willingly have dispensed. What need had they of these quasi-regal magnificences ? They mutually gave each other their love—what more could they give ?

But the families and the friends and the people of Floating Island desired that this ceremony should be surrounded with extraordinary brilliancy. And so glasses were obstinately levelled at the eastern horizon. Jem Tankerdon and Nat Coverley even offered a handsome prize to whoever first sighted this steamer, whose propeller could never propel fast enough for the public impatience.

Meanwhile the programme of the festivities was carefully elaborated. It comprised games, receptions, the double ceremony at the Protestant temple and the Catholic cathedral, the gala evening at the town hall, the festival in the park. Calistus Munbar had an eye for everything, he was everywhere, he was indefatigable, it might even be said he was ruining his health. What would you have ? His temperament drove him ahead, and you could no more stop him than you could stop an express train.

The cantata was ready. Yvernés, the poet, and Sebastien Zorn, the musician, proved worthy of each other. This cantata would be sung by the choral masses of an orpheonic society founded expressly for the purpose. The effect would be very grand when it was heard in the square of the observatory, electrically lighted, at the fall of night. Then would come the appearance of the young couple before the officer of the civil power, and the religious marriage would be celebrated at midnight amid the fairy surroundings of Milliard City.

At last the expected ship was signalled in the offing. It was one of the look-outs at Starboard Harbour who won the prize, which was worth a respectable number of dollars.

It was nine o'clock in the morning of the 19th of February when the steamer came into harbour, and the landing at once began.

Useless to give in detail the names of the articles, jewels, dresses, objects of art, which composed this nuptial cargo. Suffice it to know that they were on view in the vast saloons of the Coverley mansion, and the show was an unprecedented success. The whole population of Milliard City wanted to inspect these marvels. That numbers of people extraordinarily rich might obtain such magnificent products at a price may be true ; but we must also take into account the taste and artistic feeling which had presided at their selection, and that could not be sufficiently admired. If anyone is anxious to see a list of the said articles, he will find them in the *Starboard Chronicle* and *New Herald* of the 21st and 22nd of February. If they are not satisfied at that, it is because absolute satisfaction does not exist in this world.

"*Fichtre !*" said Yvernès, when he came away from the saloons in Fifteenth Avenue in company with his three comrades.

"*Fichtre !*" said Pinchinat, "appears to me to be the correct expression. It intimates that you would like to marry Miss Coverley without her dowry—for herself alone."

As to the two young people, the truth is that they took but little notice of this stock of masterpieces of art and fashion.

After the steamer's arrival, Floating Island resumed its westerly course so as to reach the New Hebrides. If one of the islands was sighted before the 27th, Captain Sarol would be landed with his companions, and Floating Island would begin its return journey.

The Malay captain was very familiar with these regions of the Western Pacific, and this made the task of navigating an easy one. By request of Commodore Simcoe, who had secured his services, he remained on duty at the observatory tower. As soon as the first heights appeared nothing would be easier than to approach the island of Erromango, one of the most easterly of the group—which would enable them to avoid the numerous reefs of the New Hebrides.

Was it chance, or was it that Captain Sarol, desirous of being present at the marriage festivities, took the Island along so slowly that the first islands were not signalled until the morning of the 27th of February—the very day fixed for the wedding.

It mattered little, however. The marriage of Walter Tankerdon and Di Coverley would be none the less happy for having been celebrated in view of the New Hebrides, and it gave so much pleasure to these brave Malays—and they made no secret of it—who would be free to take part in the festivities on Floating Island.

Several islets were first sighted and passed according to the very precise indications of Captain Sarol, and Floating Island then steered for Erromango, leaving to the south the heights of Tanna.

In these regions Sebastien Zorn, Frascolin, Pinchinat, and Yvernès were not far—three hundred miles at the outside—from the French possessions in this part of the Pacific, the Loyalty Islands and New Caledonia, that penitentiary situated at the antipodes of France.

Erromango is much wooded in the interior, undulated with many hills, at the foot of which extend wide, cultivable plateaux. Commodore Simcoe stopped within a mile of Cook Bay, on the eastern coast. It was not prudent to approach nearer, as the coral reefs ran half a mile out to sea at the water level. The Governor's intention was not to remain stationary off this island, nor to stay at any other island in the Archipelago. After the festivities the

Malays would land, and Floating Island would steer towards the Equator, on the way to Madeleine Bay.

It was one o'clock in the afternoon when Floating Island remained stationary.

By order of the authorities everyone had a holiday, even the sailors and militiamen, with the exception of the customs officers on duty along the coast.

Needless to say the weather was magnificent, and the sea-breeze refreshing. According to the usual expression, "The sun shone on them."

"Positively," said Pinchinat, "this haughty disc appears to be at the orders of the shareholders! They will ask him, as Joshua did, to make the day longer, and he will obey them! O power of gold!"

We need not enlarge on the different items of the sensational programme that had been drawn up by the superintendent. At three o'clock all the inhabitants, those of the country as well as those of the town and the forts, flocked into the park along the banks of the Serpentine. The notables mixed familiarly with the populace. The sports were carried on with an enthusiasm which might perhaps be accounted for by the value of the prizes. Dances were organised in the open air. The most brilliant was given in one of the large halls of the casino, in which the young people danced with much grace and animation. Yvernès and Pinchinat took part in these dances, and yielded to none in their duties as partners to the prettiest of the Milliardites. Never had his Highness been so amiable, never had he shown so much wit, never had he such a success. All the Tankerdons and Coverleys were there, and the graceful sisters of the bride seemed to be very happy at her happiness. Miss Coverley walked about on Walter's arm, in which there was nothing strange considering that they were citizens by birth of free America. They were applauded, they were offered flowers, compliments were bestowed on them, which they received with perfect affability.

And during the hours that followed refreshments were served in profusion, so that nothing should interfere with the people's good humour.

When night came, the park was resplendent with the electric fires that the aluminium moons poured down in torrents. The sun had wisely disappeared behind the horizon. Would he not have been humiliated by these artificial effluences which made the night as bright as the day !

The cantata was sung between nine and ten o'clock, with such success as neither poet nor musician had ever hoped for. Perhaps, at this moment, the violoncellist felt inclined to withdraw his unjust prejudice against the Pearl of the Pacific.

Eleven o'clock struck, and a long procession advanced towards the town hall. Walter Tankerton and Miss Coverley were walking in the midst of their relatives. The whole population accompanied them along First Avenue.

Governor Cyrus Bikerstaff was waiting in the grand saloon of the town hall. The finest of all the marriages it had been given him to celebrate during his administrative career, was about to be accomplished.

Suddenly shouts were heard towards the outer quarter of the Larboard section.

The procession stopped in the middle of the avenue.

Almost immediately with these shouts, which increased, detonations were heard.

A moment afterwards some customs officers—many of them wounded—ran into the square opposite the town hall.

Anxiety was at its height. Through the crowd ran that unreasoning fear which precedes an unknown danger.

Cyrus Bikerstaff appeared on the steps of the town hall, followed by Commodore Simcoe, Colonel Stewart, and the notables, who had just joined them.

To the questions put to them, the customs officers replied that Floating Island had just been invaded by a band of New Hebrideans—three or four thousand of them—and that Captain Sarol was at their head.

CHAPTER XI

Such was the outbreak of the abominable conspiracy prepared by Captain Sarol with the concurrence of the Malays rescued with him by Floating Island, the New Hebrideans embarked at Samoa, and the natives of Erromango and the neighbouring islands. What would it end in? No one could say, considering the conditions under which this sudden and terrible attack was made.

The New Hebridean group comprises at least a hundred and fifty islands, which, under the protection of England, forms a geographical dependency of Australia. Nevertheless, here, as at the Solomon Islands, situated in the north-west of the same regions, this question of protectorate is an apple of discord between France and the United Kingdom. And again, the United States do not look favourably on the establishment of European colonies in an ocean of which they dream of claiming the exclusive enjoyment.

The population of the New Hebrides is composed of negroes and Malays of Kanaka origin. But the character of these natives, their temperament, their instincts, differ according as they belong to the northern or southern islands—which permits of the archipelago being divided into two groups.

In the northern group at Santo Island at Saint Philip Bay, the natives are of a higher type, their colour not so dark, and their hair not so woolly. The men, short and strong, gentle and peaceful, rarely attack the business establishments or European ships. The same may be said regarding Vaté or Sandwich Island, in which most of the villages are flourishing, among others, Port Vila, the capital of the archipelago—which also bears the name Franceville—where our colonists avail themselves of the riches of an admirable soil, luxuriant pasturages, fields adapted for cultivation, land suitable for plantation of coffee, bananas, coconuts, and the lucrative industry

of coprah-making. In this group the customs of the natives have completely changed since the arrival of the Europeans. Their moral and intellectual level has been raised. Thanks to the efforts of the missionaries, the scenes of cannibalism, so frequent formerly, have ceased to exist. Unfortunately the Kanaka race is disappearing, and it is only too evident that it will finish by becoming extinct, to the detriment of this northern group, in which it has been transformed by the contact of European civilisation.

But these regrets would be misplaced with regard to the southern islands of the archipelago. And it was not without reason that Captain Sarol had chosen this group for his criminal attempt on Floating Island. On these islands the natives remain veritable Papuans, and may be relegated to the lowest scale of humanity, at Tanna as at Erromango. Concerning this last, an old sandal-wood dealer remarked to Doctor Hayers, "If this island could speak, it would tell things that would make the hair stand on your head."

In fact, the race of these Kanakas of inferior origin has not been improved by Polynesian blood, as in the northern islands. At Erromango, of ten thousand five hundred inhabitants, the English missionaries, five of whom have been massacred since 1839, have converted only half. The other half remains pagan. Besides, converted or not, they all still represent those savage natives, who deserve their evil reputation, although they are of shorter stature and less robust constitution than those of Santo Island and Sandwich Island. And hence the serious dangers against which it is necessary to warn tourists venturing into the southerly group.

We may mention a few examples. Fifty years ago the brig *Aurore* was piratically attacked, and there were severe repressive measures in consequence on the part of France. In 1869 the missionary Gordon was killed by tomahawks. In 1875 the crew of an English ship was treacherously

attacked and massacred, and then eaten by cannibals. In 1894, in the neighbouring Louisiade Archipelago, at Rossel Island, a French merchant and his workman, and the captain of a Chinese ship and his crew, perished under the blows of cannibals. Finally the English cruiser *Royalist* was forced to undertake a campaign to punish these savage people for having massacred a great number of Europeans. And as Pinchinat was being told this story, he, who had recently escaped from the terrible molars of the Fijians, forbore to shrug his shoulders.

Such were the people among whom Captain Sarol had recruited his accomplices. He had promised them the pillage of this opulent Pearl of the Pacific, not an inhabitant of which was to be spared. Of these savages, who were awaiting his appearance at the approaches to Erromango, some had come from the neighbouring islands, separated by narrow arms of the sea ; principally from Tanna, which is within thirty-five miles to the south. From here had come the sturdy natives of the district of Wanissi, savage worshippers of the god Teapolo, and whose nudity is almost complete, the natives of Plage Noire, of Sangalli, the most formidable and the most dreaded of the archipelago.

But although the northern group is relatively less savage, it does not follow that no contingent from there had placed itself under Captain Sarol. To the north of Sandwich Island there is the island of Api, with its eighteen thousand inhabitants, where they eat their prisoners, the body of which is reserved for the young people, the arms and thighs for the full-grown men, the intestines for the dogs and pigs. There is the island of Paama with its ferocious tribes, who yield in nothing to the natives of Api. There is the island of Mallicolo, with its cannibal Kanakas. There is finally Aurora Island, one of the worst of the archipelago, in which no white man lives, and in which, a few years before, had been massacred the crew of the French coaster. It was from these different islands that reinforcements had come to Captain Sarol.

As soon as Floating Island appeared, as soon as it was within a few cables' length of Erromango, Captain Sarol had given the signal expected by the natives.

In a few minutes the rocks at the water level had given passage to three or four thousand savages.

The danger was most serious, for these New Hebrideans let loose on Milliard City would recoil from no attempt, from no violence. They had the advantage of surprise, and were armed not only with long javelins tipped with bone, which make very dangerous wounds, and with arrows poisoned with a sort of vegetable venom, but with Snider rifles, the use of which has greatly spread in the archipelago.

At the beginning of this affair, which had been a long time in preparation—for it was Sarol who was marching at the head of the assailants—the militia, the sailors, the functionaries, every man in a fit state to fight, was called upon.

Cyrus Bikerstaff, Commodore Simcoe, and Colonel Stewart were quite equal to the occasion. The King of Malecarlie had offered his services. Although he was no longer in the vigour of youth, he at least had courage. The natives were still at Larboard Harbour, where the officer of the port was trying to organise resistance. But no doubt the bands would not delay to precipitate themselves on the town.

To begin with, orders were given to shut the gates of the enclosure round Milliard City, in which almost the whole population had assembled for the marriage festivities.

That the country and park would be ravaged was to be expected. That the two harbours and the electrical works would be devastated was to be feared. That the batteries at the Prow and Stern would be destroyed, there was nothing to prevent. The greatest misfortune would be that the artillery of Floating Island would be turned against the town, and it was not impossible that the Malays knew how to use it.

First of all, at the King of Malecarlie's proposal, most of the women and children were sent to the town hall. This vast municipal hotel was plunged in profound obscurity, as was the entire island, for the electrical apparatus had ceased working, owing to the engineers having to escape from the assailants.

However, by Commodore Simcoe's efforts, the arms deposited at the town hall were distributed to the militia and the sailors, and there was no scarcity of ammunition. Leaving Di with Mrs. Tankerdon and Mrs. Coverley, Walter came to join the group, which now included Jem Tankerdon, Nat Coverley, Calistus Munbar, Pinchinat, Yvernès, Frascolin, and Sebastien Zorn.

"Well," murmured the violoncellist, "it seems as though this was to be the end of it."

"But it is not the end of it!" exclaimed the superintendent. "No! it is not the end; and it is not our dear Floating Island which will succumb to a handful of Kanakas!"

Well spoken, Calistus Munbar! We can understand what rage devoured you at the thought of these rascally New Hebrideans interrupting so well-organised a festival! Yes! he must hope to repulse them. Unfortunately they were not superior in number, and they had not the advantage of the offensive.

The reports of guns were heard in the distance, in the direction of both harbours. Captain Sarol had begun by interfering with the working of the screws, without which Floating Island could not get away from Erromango, which was his basis of operations.

The Governor, the King of Malecarlie, Commodore Simcoe, Colonel Stewart, united in a committee of defence, had at first thought of making a sortie. No, that would be to sacrifice a number of the defenders of whom they had such want. There was no mercy to be hoped from these savages, who, like the wild beasts a fortnight before, had invaded Floating Island. Besides, would they not

attempt to wreck it on the rocks of Erromango, and then hand it over to pillage ?

An hour afterwards the assailants arrived before the gates of Milliard City. They tried to break them in in vain. They tried to climb them, but were driven back by firearms.

As Milliard City had not been taken by surprise, it had become difficult to force an entry in the darkness. And so Captain Sarol drew off his savages towards the park and country, and there waited for daylight.

Between four and five o'clock the first hues of the morning appeared on the eastern horizon. The militia and sailors under Commodore Simcoe and Captain Stewart, leaving half their forces at the town hall, marched to the observatory square, expecting that Captain Sarol would endeavour to force the gates on that side ; for as no help could come from without, it was necessary at all costs to prevent the savages from penetrating into the town.

The quartette followed the defenders, whose officers led them towards the end of First Avenue.

"To have escaped from the cannibals of Fiji," said Pinchinat, "to be obliged to defend one's cutlets from the cannibals of the New Hebrides !"

"They will not eat the whole of us !" said Yvernès.

"And I will resist to my last fragment !" added Yvernès.

Sebastien Zorn remained silent. We knew that what he thought of the adventure would not prevent him from doing his duty.

As soon as the light came, shots began to be interchanged through the gates of the square. There was a courageous defence in the enclosure of the observatory. There were victims on both sides. Among the Milliardites, Jem Tankerdon was wounded in the shoulder slightly, but he would not abandon his post. Nat Coverley and Walter were conspicuous in the fight. The King of Malecarlie endeavoured to bring down Captain Sarol, who did not spare himself among the savages.

In truth, the assailants were too many. All that Erromango, Tanna, and the neighbouring islands could furnish were in this attack on Milliard City. There was one fortunate circumstance, however, and Commodore Simcoe noticed it: Floating Island, instead of drifting on to Erromango, was being gently carried by a slight current towards the northern group, although it would have been better if it had been moving out to sea.

Nevertheless time went on, the savages redoubled their efforts, and in spite of their courageous resistance, the defenders could not keep them back. About ten o'clock the gates were forced. Before the howling crowd that swarmed into the square Commodore Simcoe had to retreat towards the town hall, which could be defended like a fortress.

In their retreat, the militia and sailors gave way foot by foot. Perhaps now they had entered the town, the New Hebrideans, carried away by their instincts of pillage, might disperse through the different quarters, and thus give the Milliardites some advantage.

Vain hope! Captain Sarol would not allow his men to leave First Avenue. By it they would reach the town hall, where they would overcome the last efforts of the besieged. When Captain Sarol was master of that, the victory would be complete. The hour of pillage and massacre would sound.

"Decidedly there are too many of them," said Frascolin, whose arm was grazed by a javelin.

And the arrows rained, and the bullets, too, as the retreat became quicker.

About two o'clock the defenders had been driven back to the town hall square. Of dead there were already fifty—of wounded about twice or thrice as many. Before the town hall was reached by the savages, its doors were closed; the women and children were moved into the interior apartments, where they would be sheltered from the projectiles. Then Cyrus Bikerstaff, the King of Malecarlie,

Commodore Simcoe, Colonel Stewart, Jem Tankerdon, Nat Coverley, their friends, the militiamen and the sailors, posted themselves at the windows, and the firing recommenced with fresh violence.

"We must hold this," said the Governor. "This is our last chance, and it will require a miracle to save us."

The assault was immediately ordered by Captain Sarol, who felt sure of success, although the task was a serious one. In fact, the doors were strong, and it would be difficult to break them in without artillery. The savages attacked them with tomahawks, under the fire from the windows, which made them lose heavily. But that did not matter to their chief; though if he could be killed, his death might change the face of matters.

Two hours elapsed. The town hall still held out. If the bullets decimated the assailants, their masses were renewed unceasingly. In vain the most skilful marksmen, Jem Tankerdon, Colonel Stewart, endeavoured to hit Captain Sarol. While numbers of his people fell around him, he seemed invulnerable.

And it was not Sarol, amid a more furious fusillade than ever, whom a Snider bullet had hit on the central balcony. It was Cyrus Bikerstaff, shot full in the chest. He fell—he could only utter a few stifled words, the blood mounted to his throat. He was carried into the room behind, where he soon yielded his last breath. Thus died the first governor of Floating Island, an able administrator, an honest and great man.

The assault was pursued with redoubled fury. The doors were yielding to the axes of the savages. How could the last fortress of Floating Island be saved? How could they save the women, the children, all those within from a general massacre?

The King of Malecarlie, Ethel Simcoe, and Colonel Stewart, were discussing whether it would be better to retreat by the rear of the town hall. But where would they go? To the battery at the Stern? But could they

reach it? To one of the harbours? But were not the savages in possession of them? And the wounded, already numerous, how could they resolve to abandon them?

At this moment a fortunate thing happened, which would probably change the state of affairs.

The King of Malecarlie stepped out on to the balcony, without heeding the bullets and arrows which rained around him. He brought up his rifle and aimed at Captain Sarol, just as one of the doors was about to give passage to the assailants.

Captain Sarol fell dead.

The Malays drew back, carrying the body of their chief, and began to retreat towards the gates of the square.

Almost immediately shouts were heard at the top of First Avenue, where a fusillade broke out with renewed intensity.

What had happened? Had the defenders of the ports and batteries been successful? Had they advanced on the town? Had they attempted to take the natives in the rear, notwithstanding their small numbers?

"The firing is increasing near the observatory," said Colonel Stewart.

"The scoundrels have had a reinforcement," said Commodore Simcoe.

"I do not think so," observed the King of Malecarlie. "This firing cannot be explained——"

"Yes! There it is again," said Pinchinat, "and again to our advantage."

"Look! look!" said Calistus Munbar; "the beggars are beginning to run."

"Come, my friends," said the King of Malecarlie, "let us chase these rascals out of the town. Forward!"

Officers, militiamen, sailors, ran downstairs and out of the principal doorway.

The square was abandoned by the crowd of savages, who fled, some down First Avenue, others along the neighbouring streets.

What was the cause of this rapid and unexpected change ? Was it to be attributed to the disappearance of Captain Sarol—to the absence of leadership which had followed ? Was it possible that the assailants, so superior in force, had been discouraged by the death of their chief at the very moment the town hall was about to be carried ?

Led by Commodore Simcoe and Colonel Stewart, about two hundred men of the sailors and militia, with them Jem and Walter Tankerdon, Nat Coverley, Frascolin and his comrades, advanced down First Avenue, chasing the fugitives, who did not even turn to give them a bullet or an arrow, and threw away Sniders, bows, and javelins.

“Forward ! Forward !” shouted Commodore Simcoe, in a voice of thunder.

Round the observatory the firing grew fiercer. It was evident that a terrible fight was going on.

Help, then, had arrived on Floating Island ! But what help ? Where had it come from ?

Anyhow, the assailants were retreating on all sides, a prey to an incomprehensible panic. Had they been attacked by reinforcements from Larboard Harbour ?

Yes. A thousand New Hebrideans had invaded Floating Island, under the leadership of the French colonists of Sandwich Island. We need not be astonished at the quartette being greeted in their national language, when they met their brave compatriots.

It was under these circumstances that this unexpected, or it might be said quasi-miraculous intervention had taken place.

During the preceding night and since daybreak Floating Island had continued to drift towards Sandwich Island, where, it will be remembered, there resided a prosperous French colony. As soon as the colonists got wind of the attack devised by Captain Sarol, they resolved, with the aid of a thousand natives devoted to them, to go to the help of Floating Island. But to transport them the vessels of Sandwich Island were not sufficient.

Judge of the joy of these gallant colonists when, during the morning, Floating Island came drifting up on the current. Immediately they threw themselves into fishing-boats, followed by the natives, most of them swimming, and landed at Larboard Harbour.

In a moment the men in the Prow and Stern batteries, and those in the port, joined them. Across the country, across the park they ran, towards Milliard City, and owing to this diversion the town hall did not fall into the hands of the assailants, already shaken by the death of Captain Sarol.

Two hours afterwards, the New Hebridean bands, pursued on all sides, had to seek safety by plunging into the sea, so as to reach Sandwich Island, while the greater number of them fell under the bullets of the militia.

And now Floating Island had no more to fear ; it was saved from pillage, massacre, and annihilation.

It might seem that the issue of this terrible affair would have evoked manifestations of public joy. No ! Oh ! these Americans are always astonishing ! They said that there was nothing surprising in the result—that they had foreseen it. And yet how nearly had the attempt of Captain Sarol ended in a terrible catastrophe !

However, we may be allowed to think that the chief proprietors of Floating Island congratulated themselves in private at having been able to retain their property, and that at the moment when the marriage of Walter Tankerdon and Miss Coverley would make the future secure.

It should be said that when the lovers met again, they fell into each other's arms. And no one thought of seeing in that any breach of the proprieties. Should they not have been married a day ago ?

There was no need to seek for any ultra-American reserve in the welcome our Parisian artistes gave to the French colonists of Sandwich Island. What an exchange of grips of the hand ! What felicitations did the Quartette

Party receive from their compatriots ! If the bullets had spared them, they had none the less done their duty, these two violins, this alto, and this violoncello ! As to the excellent Athanase Dorémus, he had been quietly waiting in his room at the casino, ready for the pupil who never came—and who could reproach him ?

An exception must be made with regard to the superintendent. Ultra-Yankee as he was, his joy was delirious. But what would you have ? In his veins flowed the blood of the illustrious Barnum, and it will be cheerfully admitted that the descendants of such an ancestor would hardly be as sane as his fellow-citizens of North America.

After the affair was over, the King of Malecarlie, accompanied by the Queen, returned to his house in Thirty-seventh Avenue, where the council of notables conveyed to him the thanks which his courage and devotion to the common cause deserved.

Thus Floating Island was safe and sound. Its safety had cost it dear.

Cyrus Bikerstaff, killed at the height of the battle, sixty militiamen and sailors hit by bullets or arrows, and almost as many among the government servants and tradesmen, who had fought so bravely.

In the public mourning the people all joined, and the Pearl of the Pacific would never forget it.

With the rapidity of execution characteristic of them, these Milliardites promptly set to work to repair damages.

After a stay of a few days at Sandwich Island all trace of the sanguinary strife would disappear.

Meantime, there was complete accord with regard to the question of the military powers, which were left in the hands of Commodore Simcoe. On this head there was no difficulty, no competition. Neither Jem Tankerdon nor Nat Coverley had any ambition on this head. Later, an election would settle the important question as to the new governor of Floating Island.

The day after, an imposing ceremony summoned the

population to the quays of Starboard Harbour. The corpses of the Malays and the natives were thrown into the sea ; but it was not so with those of the citizens who had died in defence of Floating Island. Their bodies were taken to the temple and the cathedral to receive the honours due to them ; from Governor Cyrus Bikerstaff to the humblest amongst them, all were the object of the same prayer and the same sorrow.

Then this funeral cargo was confided to one of the swift steamers of Floating Island, and the ship departed for Madeleine Bay, carrying these honoured corpses to a Christian land.

CHAPTER XII

Floating Island left the neighbourhood of Sandwich Island on the 3rd of March. Before its departure, the French colony and their native allies were the object of cordial gratitude on the part of the Milliardites. These were friends whom they would see again ; they were brothers whom Sebastien Zorn and his comrades left on this island of the New Hebrides group, who would for the future appear in the annual itinerary.

Under Commodore Simcoe's direction, the repairs were quickly made. The damages were not extensive. The electrical machinery was uninjured. With what remained of the stock of petroleum, the working of the dynamos was assured for many weeks. Besides, Floating Island would soon be back in that part of the Pacific where its submarine cables would allow of its communicating with Madeleine Bay. There was, consequently, the certainty of the campaign ending without disaster. Within four months Floating Island would be on the American coast.

"Let us hope so," said Sebastien Zorn, when the superintendent was as usual enlarging on the future of this marvellous maritime invention.

"But," observed Calistus Munbar, "what a lesson we have received! These Malays, so obliging, this Captain Sarol, no one would have suspected them. This is the last time Floating Island will give shelter to strangers."

"Not even if a shipwreck throws them in the way?" asked Pinchinat.

"I do not believe any more in shipwrecks or shipwrecked crews!"

But though Commodore Simcoe had charge as before of the navigation of Floating Island, it did not follow that the civil powers were in his hands. Since the death of Cyrus Bikerstaff, Milliard City had had no mayor, and, as we know, the assistants had resigned their positions. Consequently it would be necessary to nominate a new governor of Floating Island.

As there was no official of the civil power they could not proceed to the marriage of Walter Tankerdon and Di Coverley. Here was a difficulty which would not have arisen had it not been for the machinations of that scoundrel Sarol! And not only the couple themselves, but all the notables of Milliard City, and all the population, were anxious that this marriage should be definitely settled. In it was one of the safest guarantees of the future. That there might be no delay, Walter Tankerdon was already talking of embarking on one of the Starboard Harbour steamers with the two families to the nearest archipelago, where a mayor could proceed with the nuptial ceremony. There were mayors at Samoa, at Tonga, at the Marquesas, and in less than a week, if they went full steam——

The wiser minds argued with the impatient young man. The people were busy getting ready for the election. In a few days the new governor would be nominated. The first act of his administration would be to celebrate with great pomp the marriage so ardently expected. The programme of the festivities would be resumed. A mayor! a mayor! That was the cry in every mouth.

"Let us hope that these elections may not revive the rivalries that may not be entirely extinct!" said Frascaolin.

No, and Calistus Munbar had resolved to do his best to bring matters to an end.

"Besides," he exclaimed, "have we not our lovers? You will, I think, agree with me that self-esteem has no chance against love?"

Floating Island continued its course to the north-east, towards the point where the twelfth degree of south latitude crosses the hundred and seventy-fifth of west longitude.

It was in these parts that the last cablegrams sent before the stay at the New Hebrides had communicated with the supply ships loading at Madeleine Bay. Commodore Simcoe was not at all anxious regarding provisions. The reserves were enough for more than a month, and there could be no trouble on this point. It is true that foreign news was running short. The political chronicle was meagre. The *Starboard Chronicle* complained, the *New Herald* was in despair. But what mattered it? Was not Floating Island a little world in itself, and what had it to do with what happened on the rest of the terrestrial spheroid? Did it want politics? enough for it—perhaps too much.

In fact the electoral contest began. The council of notables, in which the Larboardites equalled the Starboardites, was busy. It was certain that the choice of a new governor would give rise to discussions, for Jem Tankerdon and Nat Coverley would be on opposite sides.

A few days were spent in preliminary meetings. From the outset it was evident that the parties would not agree. Secret agitation arose in the town and ports. The agents of the two sections tried to provoke a popular movement to bring pressure on the notables. As time went on, it did not seem as though an agreement could be brought about. It began to be feared that Jem Tankerdon and

the principal Larboardites would now endeavour to carry out their ideas, so objected to by the Starboardites, and make Floating Island an industrial and commercial island. Never would the other section consent to that ! The more the Coverley party grew angry, the more the Tankerdon party persisted. Hence offensive recriminations, bitterness between the two camps, manifest coolness between the two families—a coolness which Walter and Di did not care to notice. What had all this rubbish about politics to do with them ?

There was a very simple way of arranging these matters, at least from an administrative point of view ; that was to resolve that the two competitors should take it in turn to be governor, six months one and six months the other, even a year apiece if that seemed preferable. Then there would be no rivalry, and the arrangement would satisfy both parties. But good sense has never a chance of being adopted in this world, and though it was independent of the terrestrial continents, Floating Island was none the less subject to all the passions of sub-lunary humanity.

“ There,” said Frascolin one day to his companions. “ There you have the difficulties I feared.”

“ And what do these dissensions matter to us ? ” replied Pinchinat. “ How can they damage us ? In a few months we shall be at Madeleine Bay, and our engagement will be at an end, and we can set foot on firm ground, with a little million in our pockets.”

“ If some catastrophe does not take place,” added the intractable Sebastien Zorn. “ Is such a floating machine ever sure of a future ? After the collision with the English ship, the invasion of the wild beasts ; after the wild beasts the invasion of the New Hebrideans ; after the savages the——”

“ Silence, bird of ill omen ! ” exclaimed Yvernès. “ Silence, we will put a padlock on your beak ! ”

Nevertheless, it was greatly to be regretted that the marriage had not been celebrated at the date fixed. The

families being united by a new tie, the problem would be less difficult of solution.

Commodore Simcoe tried to bring about an understanding between the two sections of the town. He was asked not to interfere in what did not concern him. He had to navigate the island, let him navigate it. He had reefs to avoid, let him avoid them. Politics were not his business.

Then arose a genial idea. It seemed to have occurred at the same moment to the minds of all. This idea was simple, it was an honourable one, it would put an end to the rivalry. The candidates themselves would doubtless bow to this just solution.

Why not offer the government of Floating Island to the King of Malecarlie? The ex-sovereign was a wise man, of firm and liberal mind. His toleration and his philosophy would be the best guarantee against the surprises of the future. He knew men from having lived amongst them. He knew that he had to reckon with their weaknesses and their ingratitude. Ambition was not his failing, and never would the thought occur to him to substitute the personal power for the democratic institutions which existed on Floating Island. He would never be more than the president of the council of administration of the new company, *Tankerton, Coverley & Co.*

An important group of merchants and functionaries of Milliard City, with whom were a certain number of the officers and sailors at the ports, decided to convey this proposal to their royal fellow-citizen.

It was in the room on the ground floor of the house in Thirty-ninth Avenue that their Majesties received the deputation. They listened with friendliness, and answered with a decided refusal. The deposed sovereigns remembered the past, and under this impression the King replied :

“ I thank you, gentlemen. We are not insensible to your request, but we are happy at present, and we hope that nothing will trouble our future. Believe me, we

have finished with the illusions that are inherent to any sovereignty whatever. I am now only an astronomer at the observatory of Floating Island, and I do not wish to be anything else."

There was no opportunity to persist, after so formal a reply, and the deputation retired.

During the few days preceding the election the excitement increased. It was impossible to arrive at an understanding. The partisans of Jem Tankerdon and Nat Coverley avoided meeting each other, even in the streets. People no longer went from one section to the other. Neither the Starboardites nor the Larboardites crossed First Avenue. Milliard City was now formed into two hostile camps. The only personage who went from one to the other, agitated, crushed, knocked up, perspiring water and blood, exhausting himself in good advice, repulsed to the right, repulsed to the left, was the despairing superintendent, Calistus Munbar. And three or four times a day he ran aground, like a rudderless ship, in the rooms of the casino, where the quartette overwhelmed him with vain consolations.

Commodore Simcoe confined himself to his special duties. He navigated Floating Island according to the itinerary. Having a holy horror of politics, he would accept whatever governor was given him. His officers, like those of Colonel Stewart, were quite as little interested in the question which had set so many heads on the boil. It was not in Floating Island that pronunciamientos were to be feared.

However, the council of notables, in permanent session at the town hall, discussed and disputed. They were taking to personalities. The police were compelled to take certain precautions, for the crowd thronged from morning to night in front of the town hall, and raised seditious cries.

On the other hand, deplorable news got abroad. Walter Tankerdon had called at the Coverley mansion, and not

been admitted. The two young people were forbidden to see one another, and as the marriage had not been celebrated before the attack of the New Hebridean bands, who dared say if it ever would be accomplished?

At last the 15th of March arrived. The election was to take place in the principal room of the town hall. A noisy crowd blocked the square, as the Roman populace formerly did before the palace of the Quirinal, when the conclave proceeded to the elevation of a Pope to the throne of Saint Peter.

What would come out of this supreme deliberation? The forecast showed that there would be an equality of votes. If the Starboardites remained faithful to Nat Coverley and the Larboardites to Jem Tankerdon, what would happen?

The great day arrived. Between one and three o'clock the ordinary life seemed to be suspended on Floating Island. From five to six thousand people stood excited beneath the windows of the municipal edifice. They awaited the result of the voting of the notables—a result which would be immediately communicated by telephone to the two sections and the two ports.

A first scrutiny took place at thirty-five minutes past one.

The candidates had obtained the same number of suffrages.

An hour afterwards there was a second scrutiny.

It in no way modified the figures of the first.

At thirty-five minutes past three there was the third and last scrutiny.

This time neither had a vote in excess of the other.

The council then separated, and it was best to do so. If it had remained sitting, the members would have become so exasperated that they would have taken to blows. As they crossed the square on their way, some of them to the Tankerdon mansion, and some to the Coverley mansion, the crowd greeted them with the most disagreeable murmurs.

But it was necessary to put an end to this state of affairs,

which was most damaging to the interests of Floating Island.

"Between ourselves," said Pinchinat, when they had heard from the superintendent the result of the three scrutinies, "it seems that there is a very simple way of settling the question."

"And what is that?" asked Calistus Munbar, lifting his arms in despair to heaven. "What?"

"Cut the island in half; divide it into two equal parts, like a cake; let the two halves go on as they please, each with a governor of its own!"

"Cut our island in half!" gasped the superintendent, as if Pinchinat had proposed to cut off a limb.

"With a cold chisel, a mallet, and a screw-wrench, the question would be solved, and there would be two moving islands instead of one on the surface of the Pacific Ocean."

Pinchinat could never be serious, even when circumstances were of such gravity.

His advice was not accepted—at least in a material sense; but if there were no mallet and screw-wrench, if no division was made down the middle of First Avenue from Prow Battery to Stern Battery, the separation was none the less accomplished from a political point of view. The Larboardites and Starboardites had become as much strangers to each other as if a hundred leagues of sea separated them. In fact, the thirty notables had decided to vote separately in default of an understanding. On one side, Jem Tankerdon was appointed governor of his section and he could govern it as he pleased. On the other, Nat Coverley was appointed governor of his section, and he could govern it as he pleased. Each of them would keep his port, his ships, his officers, his sailors, his militiamen, his functionaries, his tradesmen, his electric works, his engines, his motors, his engineers, his stokers.

This was very well, but what would Commodore Simcoe do when he wanted to turn, and how could Calistus Munbar perform his duties to the common satisfaction?

As regards the latter, it is true, it was not of much importance. His place had become a sinecure. There could be no question as to amusements and festivities when Floating Island was menaced by civil war—for a reconciliation was not possible.

This was evident from a slight indication. On the 17th of March the newspapers announced that the marriage between Walter Tankerdon and Miss Coverley was definitely broken off.

Yes ! Broken off—in spite of their prayers, in spite of their supplications ; and yet Calistus Munbar had once said that love was the strongest ! Well, no ! Walter and Di would not separate. They would abandon their relatives, they would marry in some foreign country ; they would find a corner in the world where they could be happy without so many millions hanging round their hearts !

After the nomination of Jem Tankerdon and Nat Coverley, nothing had been changed with regard to the course of Floating Island. Commodore Simcoe continued to steer north-east. Once they reached Madeleine Bay, it was probable, if the present state of things continued, that several of the Milliardites would seek on the Continent the quiet which was no longer offered them by the Pearl of the Pacific. Perhaps even Floating Island would be abandoned. And then they would liquidate it ; they would put it up to auction ; they would sell it at so much a pound, like old useless iron, and it would be melted down !

But the five thousand miles it had to travel would take another five months to accomplish. During the voyage would the direction be interfered with by the obstinacy of the two chiefs ? The spirit of revolt had begun to show itself among the people. Would the Larboardites and Starboardites come to blows, and take to firing on each other, and bathing with blood the steel sidewalks of Milliard City ?

No ! The parties would not, apparently, go to these

extremities. There would not be another secession war between north and south, or rather between the Larboard and Starboard sections of Floating Island. But the inevitable happened, at the risk of provoking a catastrophe.

In the morning of the 19th of March, Commodore Simcoe was in his office at the observatory, waiting for the first observation of altitude to be communicated to him. In his opinion Floating Island could not be far from the spot where it would meet with the supply ships. Look-outs on the tower surveyed the vast circuit of sea, so as to signal the steamers as soon as they appeared on the horizon. With the Commodore were the King of Malecarlie, Colonel Stewart, Sebastien Zorn, Pinchinat, Frascolin, Yvernès, and a few officers and functionaries—who might all be classed as neutrals, for they had not yet taken part in the intestine dissensions. The essential point for them was to arrive as soon as possible at Madeleine Bay, where this deplorable state of things would end.

At this moment two bells sounded, and two orders were transmitted to the Commodore by telephone. They came from the town hall, where Jem Tankerdon and Nat Coverley, with their respective supporters, were in different wings. Here they administered Floating Island, and we need not be astonished at the orders being contradictory.

This very morning the two governors had resolved to disagree regarding the course hitherto followed by Ethel Simcoe. Nat Coverley had decided that Floating Island should go north-east, so as to touch at the Gilbert Islands. Jem Tankerdon, with the object of opening up commercial relations, decided to go south-west, towards Australia.

Thus had the rivals committed themselves, and their friends had sworn to support them.

When he received the two orders sent simultaneously to the observatory, the Commodore remarked :

“ This is what I feared.”

“ And which must not last, in the public interest,” said the King of Malecarlie.

"What do you decide?" asked Frascaolin.

"I am curious to see how you will manoeuvre," said Pinchinat.

"Inform Jem Tankerdon and Nat Coverley," said the Commodore, "that we cannot execute their orders, as they contradict each other. Besides, it is better for Floating Island to remain where it is, and wait for the ships which are to meet it here."

This very wise reply was immediately telephoned to the town hall.

An hour passed without the observatory receiving any other orders. Probably the two governors had given up their intentions.

Suddenly Floating Island began to move in a strange manner. What did this movement indicate? That Jem Tankerdon and Nat Coverley had persisted in their obstinacy to the furthest limits.

All the persons present looked at each other interrogatively.

"What is the matter? What is the matter?"

"What is the matter?" answered the Commodore, shrugging his shoulders; "Jem Tankerdon has sent his orders direct to Watson, the engineer at Larboard Harbour, and Nat Coverley has sent contradictory orders to Somwah, the engineer at Starboard Harbour. One has given orders to go north-east, the other to go south-west. The result is that Floating Island is swinging round on its centre."

This absurd situation—comic from one point of view—probably caused a laugh. Unfortunately the double manoeuvre was extremely dangerous, as the Commodore observed. Driven round and round by six million horsepower, Floating Island was in danger of being shaken to pieces.

In fact, the engines were going full speed, the screws working at their maximum power, and the steel subsoil was all of a tremble. The motion became more noticeable. Floating Island pirouetted on its centre. The park,

the country described concentric circles, and the places on the shore swung round at from ten to twelve miles an hour.

To argue with the engineers was not to be thought of. Commodore Simcoe had no authority over them. They were subject to the same passions as the Starboardites and Larboardites. Faithful servants of their chiefs, Watson and Somwah would drive on to the bitter end, engine for engine, dynamo for dynamo.

Then occurred a phenomenon, the unpleasantness of which should have calmed the heads by softening the hearts.

On account of the rotation of Floating Island, a number of Milliardites, especially the women, began to feel strangely unwell. Within the houses there were attacks of sickening nausea, principally in those which, being farthest from the centre, were most affected by this waltzing motion.

At this farcical result, Yvernès, Pinchinat, and Frascolin burst out into peals of laughter, although matters were getting more serious.

Under the influence of this continuous whirling, Sebastian Zorn became pale, very pale. He "struck his colours," as Pinchinat said, and his heart mounted to his lips. Was this ill-timed joke never to finish? To be a prisoner on this immense turning table, which did not even have the gift of revealing the secrets of the future?

For a whole week Floating Island continued to spin round on its centre, which was Milliard City. In vain the King of Malecarlie, Commodore Simcoe, and Colonel Stewart attempted to intervene between the two powers which shared the municipal palace. Neither would lower his flag! Cyrus Bikerstaff himself, if he could have come to life again, would have found his efforts fail against such ultra-American tenacity.

Then, to add to the misfortune, the sky had been so constantly covered with clouds during this week, that it

was not possible to take an altitude. Commodore Simcoe did not know where Floating Island was. Driven round by its powerful screws, it trembled in every wall of its compartments. No one thought of staying indoors. The park was crowded with people camping in the open air. On either side were heard cries of "Hurrah for Tankerdon!" and "Hurrah for Coverley!" Eyes flashed lightnings, fists were clenched threateningly. Was civil war going to break out, with its worst excesses, now that the people had reached a paroxysm of madness?

Neither one side nor the other would see anything of the approaching danger. They would not give in, even if the Pearl of the Pacific were to break into a thousand fragments, and it would continue to spin until the dynamos ceased to drive the screws.

Amid this general irritation, in which he took no part, Walter Tankerdon was a prey to the keenest anguish. He feared not for himself, but for Miss Coverley, that some sudden breaking up would annihilate Milliard City. For eight days he had not seen her. Twenty times he had begged his father to have done with this deplorable manœuvre; but all was in vain.

Then on the night of the 27th of March, taking advantage of the darkness, he endeavoured to see Miss Coverley. He wished to be near her when the catastrophe occurred. Gliding through the crowd which blocked First Avenue, he penetrated into the hostile section, so as to reach the Coverleys' house.

A little before daybreak a terrific explosion shook the air. Driven beyond the pressure they would bear, the boilers of the Larboard section blew up with the buildings and machinery. And as the source of electrical energy suddenly gave out on this side, half Floating Island was plunged into profound darkness.

CHAPTER XIII

If the engines of Larboard Harbour were now useless, on account of the bursting of the boilers, those of Starboard Harbour were uninjured. But it was as if Floating Island had lost all power of locomotion. Reduced to its starboard screws, all it could do was to turn round and round on itself, for it could not go ahead.

This accident consequently made matters worse. While Floating Island had two sets of engines, capable of acting together, it was only necessary for an understanding to be arrived at between the Tankerdon and Coverley parties for this state of things to be put an end to. The motors would then resume their customary task of working together, and the island, after its delay of a few days, could have resumed its course to Madeleine Bay.

Now this was impossible, and Commodore Simcoe had not the propelling force necessary to enable him to leave his present position.

If Floating Island had remained stationary during the last week, if the steamers came up it might still be possible to regain the northern hemisphere.

But it was not, for an astronomic observation taken this day showed that Floating Island had drifted to the south during its prolonged gyration. It had drifted from the twelfth parallel to the seventeenth.

In fact, between the New Hebrides group and the Fiji group there are certain currents, due to the proximity of the two archipelagoes to each other, which flow to the south-east. While the engines worked together Floating Island could easily make headway against the current. But as soon as it became afflicted with vertigo it had been irresistibly drawn towards the Tropic of Capricorn.

When this was recognised, Commodore Simcoe did not hide from those we have called neutrals the gravity of the circumstances.

"We have drifted," he said, "five degrees south. What

a sailor can do with a steamer when her engines break down I cannot do with Floating Island. An island has no sails, and we are at the mercy of the currents. Where will they take us ? I do not know. As to the steamers despatched from Madeleine Bay, they will seek us in vain in the place agreed upon, and it is towards the least frequented portion of the Pacific that we are drifting, at the rate of from eight to ten miles an hour."

In these few sentences Ethel Simcoe stated the position, which it was impossible to modify. Floating Island was like an immense wreck delivered over to the caprices of the currents. If they ran towards the north, it would go north ; if they ran towards the south, it would go south—perhaps to the extreme limits of the Antarctic Ocean. And then——

This state of things soon became known to the people at Milliard City, as at both harbours. A feeling of great fear arose. Hence—which was very human—a certain softening of asperities under the fear of this new peril. They no longer dreamt of coming to blows in a fratricidal strife, and if hatreds continued, they would not at least lead to violence. Gradually everyone returned to his section, his quarter, his house. Jem Tankerdon and Nat Coverley gave up their dispute for first place. At the proposal of the two governors, the council of notables came to the only reasonable decision dictated by the circumstances, and transferred its powers to the hands of Commodore Simcoe, the only chief to whom the safety of Floating Island was henceforth entrusted.

Ethel Simcoe accepted the task without hesitation. He reckoned on the devotion of his friends, his officers, his staff. But what could he do with this vast floating apparatus, with an area of twenty-seven square kilometres, become unmanageable, now that it had no longer its two sets of engines ?

And was there not some foundation for saying that this was the condemnation of Floating Island, up to then

regarded as the masterpiece of marine construction, inasmuch as such accidents would render it the sport of the winds and waves ?

It is true that this accident was not due to the forces of Nature, over which the Pearl of the Pacific had triumphed since its foundation. It was the fault of these intestine dissensions, these rivalries of the Milliardites, this unreasonable obstinacy of some to go south and others to go north. It was their immeasurable madness that had brought about the explosion of the Larboard boilers.

But what was the good of recriminations ? What was necessary was to inquire into the damages at Larboard Harbour. Commodore Simcoe assembled his officers and his engineers. The King of Malecarlie went with them. It was assuredly not this royal philosopher who was surprised at human passions bringing about such a catastrophe.

The commission went to the Larboard engine works. The explosion of the over-driven boilers had caused the deaths of two engineers and six stokers. The ravages were no less complete in the workshops where the electricity was produced for the different services of this half of Floating Island. Fortunately the starboard dynamos continued to work, and as Pinchinat observed—

“ We have got off with the loss of one eye.”

“ That may be,” replied Frascolin, “ but we have also lost a limb, and the one that is left is of little use to us.”

To be blind and lame was too much.

The result of the inquiry was that the damages could not be repaired, and that it would be impossible to arrest the movement towards the south. Hence the need of waiting until Floating Island got out of the current which was taking it below the tropic.

This being ascertained, the next thing was to examine the state of the compartments of the hull. Had they not suffered from the gyratory movement which had so violently shaken them ? Were the plates strained, the rivets started ?

If leaks had opened, what means were there of stopping them?

The engineers proceeded to this second inquiry. Their reports, communicated to Commodore Simcoe, were anything but comforting. In many places the shaking had cracked the plates and broken the ties. Thousands of rivets had been started, and there had been a good deal of breakage. Certain compartments had already been invaded by the sea. But as the line of flotation had not been lowered, the strength of the hull had not been seriously affected, and the new proprietors of Floating Island had nothing to fear for their property. It was near the Stern Battery that the cracks were most numerous. At Larboard Harbour one of the piers had dropped off into the sea when the explosion occurred. But Starboard Harbour was all right, and its docks afforded every safety for vessels against the waves of the sea.

Orders were given to repair all that was repairable. It was important that the population should be tranquilised. It was enough, it was too much, that without its Larboard screws Floating Island could not make for the nearest land. For that there was no remedy.

There remained the serious question of hunger and thirst. Would the reserves be sufficient for a month, for two months?

These particulars were furnished to Commodore Simcoe.

With regard to the water there was nothing to fear. One of the distilling apparatus had been destroyed by the explosion, but the other, which continued at work, could furnish all requirements.

With regard to provisions, the state of affairs was not so promising. Taking everything into account, their duration would not exceed a fortnight, unless ten thousand people were placed on short rations. The fruits and vegetables came, as we know, from the outside. And outside—where was that? Where was the nearest land, and how could it be reached?

Then, whatever might be the effect, Commodore Simcoe

had to make instant arrangements as to putting the people on rations. That evening the telephones and telautographs spread this melancholy news.

Whereupon general dismay in Milliard City and the two ports, and a presentiment of worse catastrophes. Would not the spectre of famine, to adopt a familiar image, soon appear on the horizon, as there existed no means of replenishing the stock of provisions? In fact, Commodore Simcoe had not a single ship to send to the American continent. Fate had so willed it that the last had been sent away three weeks before with the mortal remains of Cyrus Bikerstaff and the defenders in the battle at Erromango. It was to be feared that matters of mere self-esteem would put Floating Island in a worse position than when it was invaded by the New Hebrideans.

What is the use of possessing millions, of being as rich as Rothschilds, Mackays, Astors, Vanderbilts, Goulds, when no riches can keep away famine? Doubtless, these nabobs had the greater part of their fortunes safely placed in the banks of the new and old continents. But who knew if the day were not approaching when a million would not procure a pound of meat or a pound of bread?

After all, the fault was in their absurd dissensions, their stupid rivalries, their desire to seize upon power. The culprits were the Tankerdons and the Coverleys, who had caused all the trouble. Let them take care of reprisals, of the rage of the officers, and functionaries, and employees, and tradesmen, of the whole of the population they had brought into such danger! To what excesses might not these betake themselves when they were suffering the tortures of hunger?

Let us say, that no reproaches were levelled against Walter Tankerdon nor Miss Coverley, who shared none of the blame deserved by their families. No! The young man and the girl were not responsible! They were the bond that might have assured the future of both sections, and it was not they who had broken it!

For two days, owing to the state of the sky, no observation could be taken, and the position of Floating Island could not be ascertained with any certainty.

On the 31st of March the zenith at dawn was clear enough, and the mists in the offing soon died away. There was reason to hope that an altitude could be taken under good conditions.

The observation was awaited with feverish impatience. Many hundreds of the inhabitants went out to Prow Battery. Walter Tankerdon joined them. But neither his father, nor Nat Coverley, nor any of the notables, who could be justly accused of having brought about this state of affairs, left their houses, where they were kept indoors by public indignation.

A little before noon the observers prepared to catch the solar disc at the instant of its culmination. Two sextants, one in the hands of the King of Malecarlie, the other in the hands of Commodore Simcoe, were directed towards the horizon.

As soon as the altitude was taken, the calculations began, with the needful corrections, and the result gave $29^{\circ} 17'$ lat. S. About two o'clock a second observation, made under the same favourable conditions, indicated $179^{\circ} 32'$ long. E.

And so, since Floating Island had been a prey to this gyratory folly, the currents had carried it about a thousand miles to the south-east.

When the position was marked on the map, this was what appeared.

The nearest islands—a hundred miles distant at least—were the Kermadecs, barren rocks, hardly inhabited, without resources; and, besides, how could they be reached? Three hundred miles to the south was New Zealand, and how could that be reached if the currents took them along the open sea? To the west, fifteen hundred miles, was Australia—to the east, several thousand miles, was South America, in the neighbourhood of

Chili. Beyond New Zealand was the Antarctic Ocean. Was it there, on the lands of the Pole, that Floating Island was to be wrecked? Was it there that navigators would one day find a whole population dead of misery and hunger?

Commodore Simcoe proceeded to study the currents of these seas with the greatest care. But what would happen if they did not change, if they did not meet opposing currents, if one of those formidable tempests broke out which are so frequent in the circumpolar regions?

The news was well calculated to provoke alarm. Feeling rose higher and higher against the authors of the trouble—those mischievous nabobs of Milliard City, who were responsible for this state of affairs. It required all the influence of the King of Malecarlie, all the energy of Commodore Simcoe and Colonel Stewart, all the devotion of their officers, all their authority over the sailors and soldiers of the militia to prevent an insurrection.

The day passed without change. All had to submit to be rationed, and to restrict themselves to the absolutely necessary as regards food—the wealthiest as well as those who were not so wealthy.

Meanwhile a service of look-outs was carefully arranged, and the horizon strictly watched. If a ship appeared, they would signal it, and perhaps it would be possible to enter into communication with it. Unfortunately Floating Island had drifted out of the maritime routes, there being few vessels which traversed these regions bordering on the Antarctic Ocean. And beyond to the south, there arose before the affrighted imagination the spectre of the Pole lighted by the volcanic gleams of Erebus and Terror.

A fortunate circumstance occurred in the night of the 3rd of April. The north wind, which had been violent for some hours, fell suddenly. A dead calm succeeded, and the breeze went suddenly round to the south-east, in one of those atmospheric caprices so frequent at the periods of the equinox.

Commodore Simcoe began to hope. Floating Island need only be forced a hundred miles to the westward for the counter-current to take it near Australia or New Zealand. Anyhow, its progress towards the Polar Sea would be checked, and it was possible that ships might be met with in the vicinity of the largest islands of Australasia.

As the sun rose, the breeze freshened from the south-east. Floating Island was plainly enough affected by it. Its high buildings, the observatory, the town hall, the temple, the cathedral, offered a certain resistance to the wind. They acted as sails for this enormous vessel of four hundred and thirty-two million tons.

Although the sky was swept by swift clouds, the solar disc appeared at intervals, and a good observation would probably be taken. In fact, on two occasions the sun was caught between the clouds, and the calculation showed that, since the day before, Floating Island had mounted two degrees towards the north-west.

It was difficult to admit that this was entirely due to the influence of the wind. The conclusion was that the island had drifted into one of the eddies which divide the great currents of the Pacific ; that it had had the good fortune to enter one that was taking it to the north-west, and that its chances of safety were considerable. But there must be no delay, for it was necessary to reduce further the rations. The reserves were diminishing at a rate which caused anxiety in the presence of ten thousand inhabitants to feed.

When the last astronomical observation was communicated to the ports and the town it somewhat allayed the excitement. We know how suddenly a crowd will pass from one sentiment to another, from despair to hope. That is what happened. These people, very different from the miserable masses of the great continental cities, ought to be and were less subject to panic, more reflective, more patient. But with a threatened famine was not everything to be feared ?

During the morning the wind showed a tendency to freshen. The barometer fell slowly. The sea rose in long, powerful waves, proving that it was subject to great agitation in the south-east. Floating Island, hitherto impassive, was no longer insensible to these enormous disturbances of level. Some of the houses shook from top to bottom, and the things in them began to shift, as if there were an earthquake. The phenomenon was new to the Milliardites, and gave rise to considerable uneasiness.

Commodore Simcoe and his staff remained constantly on duty at the observatory, where the whole administration was concentrated. The shocks began to affect the observatory, and the extreme seriousness of the matter was recognised.

"It is too evident," said the Commodore, "that Floating Island has been injured below. Its compartments have opened. Its hull has no longer the rigidity which rendered it so solid."

"It is to be hoped," said the King of Malecarlie, "that it will not have to stand a violent storm, for it is no longer strong enough to resist it."

Yes! And now the people began to lose confidence in the artificial soil. They felt that their foothold was about to fail them. Better a hundred times be smashed on the rocks of the Antarctic lands. To fear every moment that Floating Island would open and be swallowed up in the depths of the Pacific, which had never yet been sounded, was enough to make the bravest hearts fail as they thought of it.

It was impossible to doubt that fresh injuries had occurred in some of the compartments. Partitions had given way, and the rivets of the plates must have been torn out. In the park, along the Serpentine, on the surface of the outer streets of the town, there were strange undulations resulting in dislocations of the soil. Already some of the buildings had begun to lean, and if they fell, they would break in the substructure on which their foundation

rested. That the sea had made its way into the subsoil was unmistakable, for the water-line had altered. Nearly all round, at the two ports as at the batteries, the line had sunk a foot, and if it sunk more the waves would come over the coast. Floating Island was in danger ; its foundering was only a question of a few hours.

Commodore Simcoe would have kept this quiet, for it would probably cause a panic and worse perhaps. To what excesses might not the people be led against those responsible for this disaster ? They could not seek safety in flight like the passengers of a ship, throw themselves into boats, or construct a raft, as a crew does, in the hope of being saved from the sea. No ! The raft was Floating Island itself ; and it was going down.

From hour to hour during the day Commodore Simcoe noted the changes in the water-line. Floating Island continued to settle down. Hence infiltration must be taking place in the compartments, slow, but incessant and irresistible.

At the same time the weather was getting worse. The sky was covered with red, coppery hues. The barometer was falling more quickly. The atmosphere had every sign of an approaching storm. Behind the accumulated vapours the horizon became so restricted that it seemed to be limited to the shore of Floating Island.

As the evening came on, terrible gusts of wind arose. In the fury of the surge the compartments burst, the crossbars broke, the plates were torn away. Everywhere was a sound of the cracking of metal. The avenues of the town, the lawns of the park threatened to gape open. As night approached Milliard City was abandoned for the country, which, less laden with heavy building, seemed to be safer. The whole population lay scattered between the ports and the batteries.

About nine o'clock a violent shock shook Floating Island to its foundations. The works at Starboard Harbour, which furnished the electric light, fell into the sea. The

darkness was so profound that neither sky nor sea was visible.

Immediately more quakings of the ground took place, and the houses began to fall as if they were built of cards. In a few hours nothing would be left of the superstructure of Floating Island.

"Gentlemen," said Commodore Simcoe, "we can no longer remain in the observatory, which is in danger of being a heap of ruins. Let us get into the country, and wait until the storm is over."

"It is a cyclone," replied the King of Malecarlie, showing the barometer, fallen to 713 millimetres.

Floating Island had been caught in one of those cyclonic movements which act like powerful condensers. These eddying tempests formed by a mass of water, whose gyration takes place round an almost vertical axis, move from east to west along the north of the southern hemisphere. A cyclone is the atmospheric phenomenon most fraught with disasters, and to escape from it, its comparatively calm centre must be reached, or at least the right side of its trajectory, the workable semicircle which is free from the fury of the waves. But this manœuvre was impossible for want of motors. This time it was not human stupidity nor the imbecile obstinacy of its leader which was ruining Floating Island, but a formidable atmospheric disturbance which would end by annihilating it.

The King of Malecarlie, Commodore Simcoe, Colonel Stewart, Sebastien Zorn and his comrades, the astronomers, and the officers, abandoned the observatory, where they were no longer safe. It was time. Scarcely had they gone a hundred yards, before the lofty tower collapsed with a horrible noise, fell through the ground, and disappeared into the abyss.

A moment afterwards the entire edifice was a mass of ruins.

Nevertheless the quartette thought of going up First Avenue and running to the casino, where their instruments

were, which they wished to save if possible. The casino was still standing. They reached it, they mounted to their rooms, they carried off the two violins, the alto, and the violoncello to the park, in which they sought refuge.

There were gathered several thousand persons of both sections. The Tankerdon and Coverley families were there, and perhaps it was fortunate for them that amid the darkness they could not see each other, could not recognise each other.

Walter had, however, been fortunate enough to meet with Di. He would try and save her at the moment of the supreme catastrophe. He would cling with her to some piece of wreckage.

The girl divined that the young man was near her, and this cry escaped her :

“ Ah ! Walter ! ”

“ Di, dear Di ! I am here. I will not leave you any more.”

As to our Parisians, they would not leave each other. They would remain together. Frascaolin had lost nothing of his coolness. Yvernès was very nervous. Pinchinat was ironically resigned. Sebastien Zorn said to Athanase Doré-mus, who had at last decided to join his compatriots :

“ I told them it would end badly ! I predicted it ! ”

“ Enough of your tremolos in a minor key, old Isaiah,” said his Highness ; “ start on your penitential psalms.”

Towards midnight the force of the cyclone increased. The converging winds raised monstrous waves and hurled them against Floating Island. Where would this strife of the elements take them ? To be shattered on some reef ? To be rent asunder in mid-ocean ?

The hull was now rent in a thousand places. The points were cracking everywhere. St. Mary's Church, the temple, the town hall, had fallen through the gaping fissures through which the sea came leaping up. Of these magnificent edifices not a vestige remained. What riches, what treasures, pictures, statues, objects of art had vanished for ever ! The

people would see no more of this superb Milliard City when daylight came, if ever the daylight came for them.

The sea began to spread over the country, over the park. The island sank lower and lower in the water. The surface of Floating Island was at the level of the sea, and the cyclone was driving the waves over on to it.

No shelter now anywhere. Prow Battery, which was then to windward, afforded no protection against the waves or the squalls which swept on to it. The compartments opened, and the dislocation continued, with a noise that was heard above the most violent rolls of thunder. The supreme catastrophe was approaching.

About three in the morning the park cracked along a length of two kilometres in the bed of Serpentine River, and through this the sea flowed. Instant flight was inevitable, and the people dispersed into the country. Some ran towards the ports, others towards the batteries. Families were separated ; mothers in vain sought for their children ; while the sea rolled over Floating Island as if in an enormous tidal wave.

Walter Tankerdon, who had not left Di, tried to lead her towards Starboard Harbour. She had not strength to follow him. He lifted her, almost inanimate ; he carried her in his arms ; and in this way he went through the terror-stricken crowd, amid this horrible darkness.

At five o'clock in the morning, more cracking and rending of metal were heard in the east.

A piece about half a square mile in area had been detached from Floating Island.

It was Starboard Harbour, with its works, its engines, its warehouses, that had drifted off.

Beneath the redoubled blows of the cyclone, then at the height of its violence, Floating Island was thrown about like a wreck. Its hull became broken up. The compartments divided ; and some, as the waves leapt over them, disappeared in the depths of the ocean.

"After the burst-up of the company," said Pinchinat, "the burst-up of Floating Island."

That was the summing-up of the situation.

Of the marvellous Floating Island there now remained but a few scattered pieces, like the sporadic fragments of a shattered comet, floating not in space, but on the surface of the wide Pacific.

CHAPTER XIV

When the day broke, a spectator from a height of a few hundred feet would have seen three fragments of Floating Island, measuring two or three hectares each, floating on the sea, and about a dozen of smaller size at a short distance from one another.

That was all that was left of the Pearl of the Pacific.

There must, therefore, have been many hundred victims of the catastrophe; and the survivors might be thankful that Floating Island had not been swallowed up entirely in the waters of the Pacific.

But if they were far from land, how were these fragments to reach a coast? Were the people to perish by famine? And would there survive a single witness of this disaster?

No, there was no need to despair. These drifting fragments bore energetic men, and all that was possible to do for the common safety would be done.

It was on the fragment around Prow Battery that were gathered Commodore Ethel Simcoe, the King and Queen of Malecarlie, the staff of the observatory, Colonel Stewart, some of the officers, a certain number of the notables of Milliard City, the clergy—in fact, an important part of the population.

There were also the Coverley and Tankerdon families, overwhelmed by the frightful responsibility which rested on their chiefs. And were they not also smitten in their dearest affections, for Walter and Di had disappeared!

Were they on one of the other fragments? Could they ever hope to see them again?

The Quartette Party with their precious instruments were complete. To use a well-known formula, "death alone would separate them." Frascolin was still taking matters coolly, and had not lost all hope. Yvernès, who was accustomed to look at things on their extraordinary side, remarked :

"It would be difficult to imagine a grander finish."

Sebastien Zorn was nearly crazy. To have been the prophet predicting the misfortunes of Floating Island, as Jeremiah did the misfortunes of Sion, did not console him. He was hungry, he was cold, he was continually coughing.

And Calistus Munbar? Well, the superintendent was simply sublime—yes, sublime! He would not despair of the safety of the people, or the safety of Floating Island. Floating Island could be repaired. The fragments were sound, and it could not be said that the elements had triumphed over this masterpiece of naval architecture.

It was certain that danger was no longer imminent. All that could sink during the cyclone had sunk with Milliard City—its hotels, its houses, the works, the batteries, all the heavy superstructure. The fragments now were in good condition. They were floating higher than before, and the waves were not sweeping over their surface.

Commodore Simcoe, like the captain of a disabled ship, aided by his devoted staff, had set to work. In the first place, would it be possible to join up the pieces that were floating separately? If it were impossible, could they establish communications between them? This last question was easily answered in the affirmative, for several boats had remained uninjured in Larboard Harbour. By sending them from one fragment to another, Commodore Simcoe could ascertain what resources were left, what amount of fresh water and provisions.

About nine o'clock in the morning, Commodore Simcoe

embarked with two of his officers in a boat which had come from Larboard Harbour to fetch him. In this boat he visited the different fragments, and this was what he ascertained in the course of the inquiry.

The distilling apparatus at Larboard Harbour had been destroyed, but the tank contained enough drinking-water for a fortnight, if the consumption were reduced to what was strictly necessary. The reserves in the store-houses were sufficient for the food of the people for nearly as long.

It was therefore necessary that in two weeks at the outside a landing should be effected on some point in the Pacific.

This information was in a certain measure reassuring. But Commodore Simcoe could not help discovering that there had been many hundred victims of this terrible night. The grief of the Tankerdon and Coverley families was inexpressible. Neither Walter nor Di had been found on any of the fragments visited by the boat. At the moment of the catastrophe the young man, carrying his betrothed, was going towards Starboard Harbour, and of this part of Floating Island nothing remained on the surface of the Pacific.

In the afternoon the wind abated from hour to hour, the sea fell, and the fragments were barely affected by the undulations of the surge. By means of the boats from Larboard Harbour, Commodore Simcoe provided for the food of the people, sending them what was necessary to save them from dying of hunger.

Communications became easier and more rapid. The different pieces, obedient to the laws of attraction, like fragments of cork on the surface of a basin of water, approached one another. And was not that of good augury to the confident Calistus Munbar, who saw in it the reconstitution of the Pearl of the Pacific?

The night went by in darkness. The time had gone when the avenues of Milliard City, the streets of the commercial quarters, the lawns in the park, the fields and prairies were

bright with electric lights, when the aluminium moons poured in profusion a dazzling effulgence over the surface of Floating Island !

Amid the darkness there were a few collisions between the fragments. These shocks could not be avoided, but fortunately they were not violent enough to cause serious damage.

At daybreak it was seen that the pieces were all very near together, and floating on a tranquil sea. In a few strokes of the oar it was easy to pass from one to the other. Commodore Simcoe had every facility for regulating the consumption of food and fresh water. That was the important point, and the people understood it and were resigned.

The boats took several families about. They went in search of those they had not yet found. What happiness among these who were met with again, who gave no thought to the dangers with which they were still threatened ! What sorrow for those who vainly sought for the absent !

It was evidently a fortunate circumstance that the sea had calmed down. But it was perhaps regrettable that the wind had not continued blowing from the south-east. It would have helped the current which in this part of the Pacific runs towards the Australian coast.

By order of Commodore Simcoe, look-outs were posted to watch every point of the horizon. If a ship appeared, they would make signals. But ships are few in these distant regions at this period of the year when the equinoctial storms prevail.

There was, therefore, a very poor chance of noticing either smoke or masts and sails along the line of sky and water. And yet about two in the afternoon Commodore Simcoe received the following communication from one of the look-outs :

“ In the north-east there is something on the move, and although the hull cannot be distinguished, it is certain that a vessel is passing in the offing.”

This news caused extraordinary excitement. The King

of Malecarlie, Commodore Simcoe, the officers and engineers, all went to the side where the vessel had been signalled from. Orders were given to attract attention by hoisting flags at the end of spars and by simultaneous discharges of the firearms they had left. If the night came before these signals were noticed, a fire would be lighted, and during the night, as it would be visible at a great distance, it was impossible that it could escape being perceived.

It was not necessary to wait until the evening. The mass in question visibly approached. Clouds of smoke rolled overhead, and there could be no doubt it was making for the fragments of Floating Island.

The glasses kept it in view, although its hull was very little above the sea, and it possessed neither masts nor sails.

"My friends," Commodore Simcoe soon exclaimed, "I am not mistaken ! It is a piece of our island ! It is Starboard Harbour, which was carried away by the currents. Doubtless Mr. Somwah has repaired his engines, and is coming to us."

Demonstrations verging on madness welcomed the news. It seemed that the safety of all was now assured. It was as if it were a vital part of Floating Island which came back with this piece of Starboard Harbour.

Matters had, in fact, happened as Commodore Simcoe supposed. After the breaking off, Starboard Harbour, seized by a counter-current, had drifted off to the north-east. When day came Mr. Somwah had repaired the slight damages to his engines, and returned to the scene of the wreck, bringing with him several hundred more survivors.

Three hours afterwards, Starboard Harbour was not more than a cable's length from the flotilla. And what transports of joy, what shouts of enthusiasm welcomed its arrival. Walter Tankerdon and Di Coverley, who had taken refuge there before the catastrophe, were there side by side.

With the arrival of Starboard Harbour, with its reserves of provisions and water, there was some chance of safety. The

stores contained enough oil to drive the engines and dynamos and work the screws for some days. Its five million horse-power would enable it to reach the nearest land. This land, according to the observations made by the officer of the port, was New Zealand.

But the difficulty was that these thousands of people could not take passage on Starboard Harbour, its area being only from six to seven thousand square metres. Would it have to be sent fifty miles away in search of help?

No ! The voyage would require considerable time, and there were not many hours to spare. There was not a day to lose if the people were to be preserved from the horrors of famine.

"We can do better than that," said the King of Malecarlie. "The fragments of Starboard Harbour and the batteries can carry all the survivors of Floating Island. Fasten these three fragments together by strong chains, and tow them one behind the other as if they were barges. Then, with Starboard Harbour at the head, its five million horse-power can take us to New Zealand."

On the 10th of April, in the morning, Starboard Harbour ran aground about a cable's length from the shore of Ravaraki Bay.

The shipwrecked people were very hospitably received by the New Zealanders, who gave everybody food who required it.

As soon as they arrived at Auckland, the marriage of Walter Tankerdon with Di Coverley was at last celebrated with all the pomp the circumstances deserved. Let us add that the Quartette Party were heard for the last time at this ceremony, at which all the Milliardites were present. It would be a happy union—would it had taken place sooner, in the interest of all ! Doubtless the young couple only possessed a poor million each—

"But," as Pinchinat said, "there is every reason to believe that they will still find happiness with such a moderate fortune."

THE BLOCKADE RUNNERS



THE BLOCKADE RUNNERS

CHAPTER I

THE "DOLPHIN"

THE Clyde was the first river whose waters were lashed into foam by a steam-boat. It was in 1812 when the steamer called the *Comet* ran between Glasgow and Greenock, at the speed of six miles an hour. Since that time more than a million of steamers or packet-boats have plied this Scotch river, and the inhabitants of Glasgow must be as familiar as any people with the wonders of steam navigation.

However, on the 3rd of December, 1862, an immense crowd, composed of shipowners, merchants, manufacturers, workmen, sailors, women, and children, thronged the muddy streets of Glasgow, all going in the direction of Kelvin Dock, the large shipbuilding premises belonging to Messrs. Tod & MacGregor. This last name especially proves that the descendants of the famous Highlanders have become manufacturers, and that they have made workmen of all the vassals of the old clan chieftains.

Kelvin Dock is situated a few minutes' walk from the town, on the right bank of the Clyde. Soon the immense timber-yards were thronged with spectators ; not a part of the quay, not a wall of the wharf, not a factory roof showed an unoccupied place ; the river itself was covered with craft of all descriptions, and the heights of Govan, on the left bank, swarmed with spectators.

There was, however, nothing extraordinary in the event about to take place ; it was nothing but the launching of a ship, and this was an everyday affair with the people of Glasgow. Had the *Dolphin*, then—for that was the name of the ship built by Messrs. Tod & MacGregor—some special peculiarity ? To tell the truth, it had none.

It was a large ship, about 1,500 tons, in which everything combined to obtain superior speed. Her engines, of 500 horse-power, were from the workshops of Lancefield Forge ; they worked two screws, one on either side the stern-post, completely independent of each other. As for the depth of water the *Dolphin* would draw, it must be very inconsiderable ; connoisseurs were not deceived, and they concluded rightly that this ship was destined for shallow straits. But all these particulars could not in any way justify the eagerness of the people : taken altogether, the *Dolphin* was nothing more or less than an ordinary ship. Would her launching present some mechanical difficulty to be overcome ? Not any more than usual. The Clyde had received many a ship of heavier tonnage, and the launching of the *Dolphin* would take place in the usual manner.

In fact, when the water was calm, the moment the ebb-tide set in, the workmen began to operate. Their mallets kept perfect time falling on the wedges meant to raise the ship's keel : soon a shudder ran through the whole of her massive structure ; although she had only been slightly raised, one could see that she shook, and then gradually began to glide down the well greased wedges, and in a few moments she plunged into the Clyde. Her stern struck the muddy bed of the river, then she raised herself on the top of a gigantic wave, and, carried forward by her start, would have been dashed against the quay of the Govan timber-yards, if her anchors had not restrained her.

The launch had been perfectly successful, the *Dolphin* swayed quietly on the waters of the Clyde, all the spectators clapped their hands when she took possession of her natural element, and loud hurrahs arose from either bank.

But wherefore these cries and this applause ? Undoubtedly the most eager of the spectators would have been at a loss to explain the reason of his enthusiasm. What was the cause, then, of the lively interest excited by this ship ? Simply the mystery which shrouded her destination ; it

was not known to what kind of commerce she was to be appropriated, and in questioning different groups the diversity of opinion on this important subject was indeed astonishing.

However, the best informed, at least those who pretended to be so, agreed in saying that the steamer was going to take part in the terrible war which was then ravaging the United States of America, but more than this they did not know, and whether the *Dolphin* was a privateer, a transport ship, or an addition to the Federal marine was what no one could tell.

“Hurrah!” cried one, affirming that the *Dolphin* had been built for the Southern States.

“Hip! hip! hip!” cried another, swearing that never had a faster boat crossed to the American coasts.

Thus its destination was unknown, and in order to obtain any reliable information one must be an intimate friend, or, at any rate, an acquaintance of Vincent Playfair & Co., of Glasgow.

A rich, powerful, intelligent house of business was that of Vincent Playfair & Co., in a social sense, an old and honourable family, descended from those tobacco lords who built the finest quarters of the town. These clever merchants, by an act of the Union, had founded the first Glasgow warehouse for dealing in tobacco from Virginia and Maryland. Immense fortunes were realised; mills and foundries sprang up in all parts, and in a few years the prosperity of the city attained its height.

The house of Playfair remained faithful to the enterprising spirit of its ancestors, it entered into the most daring schemes, and maintained the honour of English commerce. The principal, Vincent Playfair, a man of fifty, with a temperament essentially practical and decided, although somewhat daring, was a genuine shipowner. Nothing affected him beyond commercial questions, not even the political side of the transactions, otherwise he was a perfectly loyal and honest man.

However, he could not lay claim to the idea of building and fitting up the *Dolphin* ; she belonged to his nephew, James Playfair, a fine young man of thirty, the boldest skipper of the British merchant marine.

It was one day at the Tontine coffee-room under the arcades of the town hall, that James Playfair, after having impatiently scanned the American journal, disclosed to his uncle an adventurous scheme.

"Uncle Vincent," said he, coming to the point at once, "there are two millions of pounds to be gained in less than a month."

"And what to risk?" asked Uncle Vincent.

"A ship and a cargo."

"Nothing else?"

"Nothing, except the crew and the captain, and that does not reckon for much."

"Let us see," said Uncle Vincent.

"It is all seen," replied James Playfair. "You have read the *Tribune*, the *New York Herald*, *The Times*, the *Richmond Inquirer*, the *American Review*?"

"Scores of times, nephew."

"You believe, like me, that the war of the United States will last a long time still?"

"A very long time."

"You know how much this struggle will affect the interests of England, and especially those of Glasgow?"

"And more especially still the house of Playfair & Co.," replied Uncle Vincent.

"Theirs especially," added the young Captain.

"I worry myself about it every day, James, and I cannot think without terror of the commercial disasters which this war may produce; not but that the house of Playfair is firmly established, nephew; at the same time it has correspondents which may fail. Ah! those Americans, slaveholders or Abolitionists, I have no faith in them!"

If Vincent Playfair was wrong in thus speaking with respect to the great principles of humanity, always and

everywhere superior to personal interests, he was, nevertheless, right from a commercial point of view. The most important material was failing at Glasgow, the cotton famine became every day more threatening, thousands of workmen were reduced to living upon public charity. Glasgow possessed 25,000 looms, by which 625,000 yards of cotton were spun daily ; that is to say, fifty millions of pounds yearly. From these numbers it may be guessed what disturbances were caused in the commercial part of the town when the raw material failed altogether. Failures were hourly taking place, the manufactories were closed, and the workmen were dying of starvation.

It was the sight of this great misery which had put the idea of his bold enterprise into James Playfair's head.

"I will go for cotton, and will get it, cost what it may."

But, as he also was a merchant as well as his uncle Vincent, he resolved to carry out his plan by way of exchange, and to make his proposition under the guise of a commercial enterprise.

"Uncle Vincent," said he, "this is my idea."

"Well, James ?"

"It is simply this : we will have a ship built of superior sailing qualities and great bulk."

"That is quite possible."

"We will load her with ammunition of war, provisions, and clothes."

"Just so."

"I will take the command of this steamer, I will defy all the ships of the Federal marine for speed, and I will run the blockade of one of the southern ports."

"You must make a good bargain for your cargo with the Confederates, who will be in need of it," said his uncle.

"And I shall return laden with cotton."

"Which they will give you for nothing."

"As you say, Uncle. Will it answer ?"

"It will ; but shall you be able to get there ?"

"I shall, if I have a good ship."

"One can be made on purpose. But the crew?"

"Oh, I will find them. I do not want many men; enough to work with, that is all. It is not a question of fighting with the Federals, but distancing them."

"They shall be distanced," said Uncle Vincent, in a peremptory tone; "but now, tell me, James, to what port of the American coast do you think of going?"

"Up to now, Uncle, ships have run the blockade of New Orleans, Willmington, and Savannah, but I think of going straight to Charleston; no English boat has yet been able to penetrate into the harbour, except the *Bermuda*. I will do like her, and, if my ship draws but very little water, I shall be able to go where the Federalists will not be able to follow."

"The fact is," said Uncle Vincent, "Charleston is overwhelmed with cotton; they are even burning it to get rid of it."

"Yes," replied James; "besides, the town is almost invested; Beauregard is running short of provisions, and he will pay me a golden price for my cargo!"

"Well, nephew, and when will you start?"

"In six months; I must have the long winter nights to aid me."

"It shall be as you wish, nephew."

"It is settled, then, Uncle?"

"Settled!"

"Shall it be kept quiet?"

"Yes; better so."

And this is how it was that five months later the steamer *Dolphin* was launched from the Kelvin Dock timber-yards, and no one knew her real destination.

CHAPTER II

GETTING UNDER SAIL

The *Dolphin* was rapidly equipped, her rigging was ready, and there was nothing to do but fit her up. She carried three

schooner-masts, an almost useless luxury ; in fact, the *Dolphin* did not rely on the wind to escape the Federalists, but rather on her powerful engines.

Towards the end of December a trial of the steamer was made in the gulf of the Clyde. Which was the more satisfied, builder or captain, it is impossible to say. The new steamer shot along wonderfully, and the patent log showed a speed of seventeen miles an hour, a speed which as yet no English, French, or American boat had ever obtained. The *Dolphin* would certainly have gained by several lengths in a sailing match with the fastest opponent.

The loading was begun on the 25th of December, the steamer having ranged along the steamboat-quay a little below Glasgow Bridge, the last which stretches across the Clyde before its mouth. Here the wharfs were heaped with a heavy cargo of clothes, ammunition, and provisions which were rapidly carried to the hold of the *Dolphin*. The nature of this cargo betrayed the mysterious destination of the ship, and the house of Playfair could no longer keep it secret ; besides, the *Dolphin* must not be long before she started. No American cruiser had been signalled in English waters ; and, then, when the question of getting the crew came, how was it possible to keep silent any longer ? They could not embark them, even, without informing the men whither they were bound, for, after all, it was a matter of life and death, and when one risks one's life, at least it is satisfactory to know how and wherefore.

However, this prospect hindered no one ; the pay was good, and everyone had a share in the speculation, so that a great number of the finest sailors soon presented themselves. James Playfair was only embarrassed which to choose, but he chose well, and in twenty-four hours his muster-roll bore the names of thirty sailors who would have done honour to her Majesty's yacht.

The departure was settled for the 3rd of January ; on the 31st of December the *Dolphin* was ready, her hold full

of ammunition and provisions, and nothing was keeping her now.

The skipper went on board on the 2nd of January, and was giving a last look round his ship with a captain's eye, when a man presented himself at the fore part of the *Dolphin*, and asked to speak with the Captain. One of the sailors led him on to the poop.

He was a strong, hearty-looking fellow, with broad shoulders and ruddy face, the simple expression of which ill-concealed a depth of wit and mirth. He did not seem to be accustomed to a seafaring life, and looked about him with the air of a man little used to being on board a ship ; however, he assumed the manner of a Jack-tar, looking up at the rigging of the *Dolphin*, and waddling in true sailor fashion.

When he had reached the Captain, he looked fixedly at him, and said, " Captain James Playfair ? "

" The same," replied the skipper. " What do you want with me ? "

" To join your ship."

" There is no room ; the crew is already complete."

" Oh, one man, more or less, will not be in the way ; quite the contrary."

" You think so ? " said James Playfair, giving a sidelong glance at his questioner.

" I am sure of it," replied the sailor.

" But who are you ? " asked the Captain.

" A rough sailor, with two strong arms, which, I can tell you, are not to be despised on board a ship, and which I now have the honour of putting at your service."

" But there are other ships besides the *Dolphin*, and other captains besides James Playfair. Why do you come here ? "

" Because it is on board the *Dolphin* that I wish to serve, and under the orders of Captain James Playfair."

" I do not want you."

" There is always need of a strong man, and if to prove

my strength you will try me with three or four of the strongest fellows of your crew, I am ready."

"That will do," replied James Playfair. "And what is your name?"

"Crockston, at your service."

The Captain made a few steps backwards in order to get a better view of the giant who presented himself in this odd fashion. The height, the build, and the look of the sailor did not deny his pretensions to strength.

"Where have you sailed?" asked Playfair of him.

"A little everywhere."

"And do you know where the *Dolphin* is bound for?"

"Yes; and that is what tempts me."

"Ah, well! I have no mind to let a fellow of your stamp escape me. Go and find the first mate, and get him to enrol you."

Having said this, the Captain expected to see the man turn on his heels and run to the bows, but he was mistaken. Crockston did not stir.

"Well! did you hear me?" asked the Captain.

"Yes, but it is not all," replied the sailor. "I have something else to ask you."

"Ah! You are wasting my time," replied James, sharply; "I have not a moment to lose in talking."

"I shall not keep you long," replied Crockston; "two words more and that is all; I was going to tell you that I have a nephew."

"He has a fine uncle, then," interrupted James Playfair.

"Hah! Hah!" laughed Crockston.

"Have you finished?" asked the Captain, very impatiently.

"Well, this is what I have to say, when one takes the uncle, the nephew comes into the bargain."

"Ah! indeed!"

"Yes, that is the custom, the one does not go without the other."

"And what is this nephew of yours?"

"A lad of fifteen whom I am going to train to the sea ; he is willing to learn, and will make a fine sailor some day."

"How now, Master Crockston," cried James Playfair ; "do you think the *Dolphin* is a training-school for cabin-boys ?"

"Don't let us speak ill of cabin-boys : there was one of them who became Admiral Nelson, and another Admiral Franklin."

"Upon my honour, friend," replied James Playfair, "you have a way of speaking which I like ; bring your nephew, but if I don't find the uncle the hearty fellow he pretends to be, he will have some business with me. Go, and be back in an hour."

Crockston did not want to be told twice ; he bowed awkwardly to the Captain of the *Dolphin*, and went on to the quay. An hour afterwards he came on board with his nephew, a boy of fourteen or fifteen, rather delicate and weakly looking, with a timid and astonished air, which showed that he did not possess his uncle's self-possession and vigorous corporeal qualities. Crockston was even obliged to encourage him by such words as these :

"Come," said he, "don't be frightened, they are not going to eat us, besides, there is yet time to return."

"No, no," replied the young man, "and may God protect us !"

The same day the sailor Crockston and his nephew were inscribed in the muster-roll of the *Dolphin*.

The next morning, at five o'clock, the fires of the steamer were well fed, the deck trembled under the vibrations of the boiler, and the steam rushed hissing through the escape-pipes. The hour of departure had arrived.

A considerable crowd, in spite of the early hour, flocked on the quays and on Glasgow Bridge ; they had come to salute the bold steamer for the last time. Vincent Playfair was there to say good-bye to Captain James, but he conducted himself on this occasion like a Roman of the

good old times. His was a heroic countenance, and the two loud kisses with which he gratified his nephew were the indication of a strong mind.

"Go, James," said he to the young Captain, "go quickly, and come back quicker still ; above all, don't abuse your position. Sell at a good price, make a good bargain, and you will have your uncle's esteem."

On this recommendation, borrowed from the manual of the perfect merchant, the uncle and nephew separated, and all the visitors left the boat.

At this moment Crockston and John Stiggs stood together on the forecastle, while the former remarked to his nephew, "This is well, this is well ; before two o'clock we shall be at sea, and I have a good opinion of a voyage which begins like this."

For reply the novice pressed Crockston's hand.

James Playfair then gave the orders for departure.

"Have we pressure on ? " he asked of his mate.

"Yes, Captain," replied Mr. Mathew.

"Well, then, weigh anchor."

This was immediately done, and the screws began to move. The *Dolphin* trembled, passed between the ships in the port, and soon disappeared from the sight of the people, who shouted their last hurrahs.

The descent of the Clyde was easily accomplished, one might almost say that this river had been made by the hand of man, and even by the hand of a master. For sixty years, thanks to the dredges and constant dragging, it has gained fifteen feet in depth, and its breadth has been tripled between the quays and the town. Soon the forests of masts and chimneys were lost in the smoke and fog ; the noise of the foundry hammers and the hatchets of the timber-yards grew fainter in the distance. After the village of Partick had been passed the factories gave way to country houses and villas. The *Dolphin*, slackening her speed, sailed between the dykes which carry the river above the shores, and often through a very narrow channel,

which, however, is only a small inconvenience for a navigable river, for, after all, depth is of more importance than width. The steamer, guided by one of those excellent pilots from the Irish sea, passed without hesitation between floating buoys, stone columns, and biggings, surmounted with lighthouses, which mark the entrance to the channel. Beyond the town of Renfrew, at the foot of Kilpatrick hills, the Clyde grew wider. Then came Bouling Bay, at the end of which opens the mouth of the canal which joins Edinburgh to Glasgow. Lastly, at the height of four hundred feet from the ground, was seen the outline of Dumbarton Castle, almost indiscernible through the mists, and soon the harbour-boats of Glasgow were rocked on the waves which the *Dolphin* caused. Some miles farther on Greenock, the birthplace of James Watt, was passed : the *Dolphin* now found herself at the mouth of the Clyde, and at the entrance of the gulf by which it empties its waters into the Northern Ocean. Here the first undulations of the sea were felt, and the steamer ranged along the picturesque coast of the Isle of Arran. At last the promontory of Cantyre, which runs out into the channel, was doubled ; the Isle of Rattelin was hailed, the pilot returned by a shore-boat to his cutter, which was cruising in the open sea ; the *Dolphin*, returning to her Captain's authority, took a less frequented route round the north of Ireland, and soon, having lost sight of the last European land, found herself in the open ocean.

CHAPTER III

THINGS ARE NOT WHAT THEY SEEM

The *Dolphin* had a good crew, not fighting men, or boarding sailors, but good working men, and that was all she wanted. These brave, determined fellows were all, more or less, merchants ; they sought a fortune rather than glory ; they had no flag to display, no colours to defend with cannon ; in fact, all the artillery on board consisted of two small swivel signal-guns.

The *Dolphin* shot bravely across the water, and fulfilled the utmost expectations of both builder and captain. Soon she passed the limit of British seas ; there was not a ship in sight ; the great ocean route was free ; besides, no ship of the Federal marine would have a right to attack her beneath the English flag. Followed she might be, and prevented from forcing the blockade, and precisely for this reason had James Playfair sacrificed everything to the speed of his ship, in order not to be pursued.

Howbeit a careful watch was kept on board, and, in spite of the extreme cold, a man was always in the rigging ready to signal the smallest sail that appeared on the horizon. When evening came, Captain James gave the most precise orders to Mr. Mathew.

"Don't leave the man on watch too long in the rigging ; the cold may seize him, and in that case it is impossible to keep a good look-out ; change your men often."

"I understand, Captain," replied Mr. Mathew.

"Try Crockston for that work ; the fellow pretends to have excellent sight ; it must be put to trial ; put him on the morning watch, he will have the morning mists to see through. If anything particular happens call me."

This said, James Playfair went to his cabin. Mr. Mathew called Crockston, and told him the Captain's orders.

"To-morrow, at six o'clock," said he, "you are to relieve watch of the main-masthead."

For reply, Crockston gave a decided grunt, but Mr. Mathew had hardly turned his back when the sailor muttered some incomprehensible words, and then cried :

"What on earth did he say about the mainmast ?"

At this moment his nephew, John Stiggs, joined him on the fore-castle.

"Well, my good Crockston," said he.

"It's all right, all right," said the seaman, with a forced smile ; "there is only one thing, this wretched boat shakes herself like a dog coming out of the water, and it makes my head confused."

"Dear Crockston, and it is for my sake."

"For you and him," replied Crockston, "but not a word about that, John. Trust in God, and He will not forsake you."

So saying, John Stiggs and Crockston went to the sailor's berth, but the sailor did not lie down before he had seen the young novice comfortably settled in the narrow cabin which he had got for him.

The next day, at six o'clock in the morning, Crockston got up to go to his place ; he went on deck, where the first officer ordered him to go up into the rigging, and keep good watch.

At these words the sailor seemed undecided what to do ; then, making up his mind, he went towards the bows of the *Dolphin*.

"Well, where are you off to now ?" cried Mr. Mathew.

"Where you sent me," answered Crockston.

"I told you to go to the mainmast."

"And I am going there," replied the sailor, in an unconcerned tone, continuing his way to the poop.

"Are you a fool ?" cried Mr. Mathew, impatiently ; "you are looking for the bars of the main on the foremast. You are like a cockney, who doesn't know how to twist a cat-o'-nine-tails, or make a splice. On board what ship can you have been, man ? The mainmast, stupid, the mainmast !"

The sailors who had run up to hear what was going on burst out laughing when they saw Crockston's disconcerted look, as he went back to the forecabin.

"So," said he, looking up the mast, the top of which was quite invisible through the morning mists ; "so, am I to climb up here ?"

"Yes," replied Mr. Mathew, "and hurry yourself ! By St. Patrick, a Federal ship would have time to get her bowsprit fast in our rigging before that lazy fellow could get to his post. Will you go up ?"

Without a word, Crockston got on the bulwarks with

some difficulty ; then he began to climb the rigging with most visible awkwardness, like a man who did not know how to make use of his hands or feet. When he had reached the topgallant, instead of springing lightly on to it, he remained motionless, clinging to the ropes, as if he had been seized with giddiness. Mr. Mathew, irritated by his stupidity, ordered him to come down immediately.

"That fellow there," said he to the boatswain, "has never been a sailor in his life. Johnston, just go and see what he has in his bundle."

The boatswain made haste to the sailor's berth.

In the meantime Crockston was with difficulty coming down again, but, his foot having slipped, he slid down the rope he had hold of, and fell heavily on the deck.

"Clumsy blockhead ! land-lubber !" cried Mr. Mathew, by way of consolation. "What did you come to do on board the *Dolphin* ! Ah ! you entered as an able seaman, and you cannot even distinguish the main from the foremast ! I shall have a little talk with you."

Crockston made no attempt to speak ; he bent his back like a man resigned to anything he might have to bear ; just then the boatswain returned.

"This," said he to the first officer, "is all that I have found ; a suspicious portfolio with letters."

"Give them here," said Mr. Mathew. "Letters with Federal stamps ! Mr. Halliburtt, of Boston ! An Abolitionist ! a Federalist ! Wretch ! you are nothing but a traitor, and have sneaked on board to betray us ! Never mind, you will be paid for your trouble with the cat-o'-nine-tails ! Boatswain, call the Captain, and you others just keep an eye on that rogue there."

Crockston received these compliments with a hideous grimace, but he did not open his lips. They had fastened him to the capstan, and he could move neither hand nor foot.

A few minutes later James Playfair came out of his cabin and went to the forecastle, where Mr. Mathew immediately acquainted him with the details of the case.

"What have you to say?" asked James Playfair, scarcely able to restrain his anger.

"Nothing," replied Crockston.

"And what did you come on board my ship for?"

"Nothing."

"And what do you expect from me now?"

"Nothing."

"Who are you? An American, as these letters seem to prove?"

Crockston did not answer.

"Boatswain," said James Playfair, "fifty lashes with the cat-o'-nine-tails to loosen his tongue. Will that be enough, Crockston?"

"It will remain to be seen," replied John Stiggs' uncle without moving a muscle.

"Now then, come along, men," said the boatswain.

At this order, two strong sailors stripped Crockston of his woollen jersey; they had already seized the formidable weapon, and laid it across the prisoner's shoulders, when the novice, John Stiggs, pale and agitated, hurried on deck.

"Captain!" exclaimed he.

"Ah! the nephew!" remarked James Playfair.

"Captain," repeated the novice, with a violent effort to steady his voice, "I will tell you what Crockston does not want to say. I will hide it no longer; yes, he is American, and so am I; we are both enemies of the slave-holders, but not traitors come on board to betray the *Dolphin* into the hands of the Federalists."

"What did you come to do, then?" asked the Captain, in a severe tone, examining the novice attentively. The latter hesitated a few seconds before replying, then he said, "Captain, I should like to speak to you in private."

Whilst John Stiggs made this request, James Playfair did not cease to look carefully at him; the sweet young face of the novice, his peculiarly gentle voice, the delicacy and whiteness of his hands, hardly disguised by paint, the

large eyes, the animation of which could not hide their tenderness—all this together gave rise to a certain suspicion in the Captain's mind. When John Stiggs had made his request, Playfair glanced fixedly at Crockston, who shrugged his shoulders ; then he fastened a questioning look on the novice, which the latter could not withstand, and said simply to him, " Come."

John Stiggs followed the Captain on to the poop, and then James Playfair, opening the door of his cabin, said to the novice, whose cheeks were pale with emotion, " Be so kind as to walk in, miss."

John, thus addressed, blushed violently, and two tears rolled involuntarily down his cheeks.

" Don't be alarmed, miss," said James Playfair, in a gentle voice, " but be so good as to tell me how I come to have the honour of having you on board ? "

The young girl hesitated a moment, then, reassured by the Captain's look, she made up her mind to speak.

" Sir," said she, " I wanted to join my father at Charleston ; the town is besieged by land and blockaded by sea. I knew not how to get there, when I heard that the *Dolphin* meant to force the blockade. I came on board your ship, and I beg you to forgive me if I acted without your consent, which you would have refused me."

" Certainly," said James Playfair.

" I did well, then, not to ask you," resumed the young girl, with a firmer voice.

The Captain crossed his arms, walked round his cabin, and then came back.

" What is your name ? " said he.

" Jenny Halliburtt."

" Your father, if I remember rightly the address on the letters, is he not from Boston ? "

" Yes, sir."

" And a Northerner is thus in a southern town in the thickest of the war ? "

" My father is a prisoner ; he was at Charleston when

the first shot of the Civil War was fired, and the troops of the Union driven from Fort Sumter by the Confederates. My father's opinions exposed him to the hatred of the slavist part, and by the order of General Beauregard he was imprisoned. I was then in England, living with a relation who has just died, and left alone, with no help but that of Crockston, our faithful servant, I wished to go to my father and share his prison with him."

"What was Mr. Halliburtt, then?" asked James Playfair.

"A loyal and brave journalist," replied Jenny proudly, "one of the noblest editors of the *Tribune*, and the one who was the boldest in defending the cause of the negroes."

"An Abolitionist," cried the Captain angrily; "one of those men who, under the vain pretence of abolishing slavery, have deluged their country with blood and ruin."

"Sir!" replied Jenny Halliburtt, growing pale, "you are insulting my father; you must not forget that I stand alone to defend him."

The young Captain blushed scarlet; anger mingled with shame struggled in his breast; perhaps he would have answered the young girl, but he succeeded in restraining himself, and, opening the door of the cabin, he called "Boatswain!"

The boatswain came to him directly.

"This cabin will henceforward belong to Miss Jenny Halliburtt. Have a cot made ready for me at the end of the poop; that's all I want."

The boatswain looked with a stupefied stare at the young novice addressed in a feminine name, but on a sign from James Playfair he went out.

"And now, miss, you are at home," said the young Captain of the *Dolphin*. Then he retired.

CHAPTER IV

CROCKSTON'S TRICK

It was not long before the whole crew knew Miss Halliburtt's story, which Crockston was no longer hindered from telling. By the Captain's orders he was released from the capstan, and the cat-o'-nine-tails returned to its place.

"A pretty animal," said Crockston, "especially when it shows its velvety paws."

As soon as he was free, he went down to the sailors' berths, found a small portmanteau, and carried it to Miss Jenny ; the young girl was now able to resume her feminine attire, but she remained in her cabin, and did not again appear on deck.

As for Crockston, it was well and duly agreed that, as he was no more a sailor than a horse-guard, he should be exempt from all duty on board.

In the meanwhile the *Dolphin*, with her twin screws cutting the waves, sped rapidly across the Atlantic, and there was nothing now to do but keep a strict look-out. The day following the discovery of Miss Jenny's identity, James Playfair paced the deck at the poop with a rapid step ; he had made no attempt to see the young girl and resume the conversation of the day before.

Whilst he was walking to and fro, Crockston passed him several times, looking at him askant with a satisfied grin. He evidently wanted to speak to the Captain, and at last his persistent manner attracted the attention of the latter, who said to him, somewhat impatiently :

"How now, what do you want ? You are turning round me like a swimmer round a buoy : when are you going to leave off ?"

"Excuse me, Captain," answered Crockston, winking, "I wanted to speak to you."

"Speak, then."

"Oh, it is nothing very much. I only wanted to tell you frankly that you are a good fellow at bottom."

"Why at bottom?"

"At bottom and surface also."

"I don't want your compliments."

"I am not complimenting you. I shall wait to do that when you have gone to the end."

"To what end?"

"To the end of your task."

"Ah! I have a task to fulfil?"

"Decidedly, you have taken the young girl and myself on board; good! You have given up your cabin to Miss Halliburtt; good! You released me from the cat-o'-nine-tails; nothing could be better. You are going to take us straight to Charleston; that's delightful, but it is not all."

"How not all?" cried James Playfair, amazed at Crockston's boldness.

"No, certainly not," replied the latter, with a knowing look, "the father is prisoner there."

"Well, what about that?"

"Well, the father must be rescued."

"Rescue Miss Halliburtt's father?"

"Most certainly, and it is worth risking something for such a noble man and courageous citizen as he."

"Master Crockston," said James Playfair, frowning, "I am not in the humour for your jokes, so have a care what you say."

"You misunderstand me, Captain," said the American.

"I am not joking in the least, but speaking quite seriously. What I have proposed may at first seem very absurd to you; when you have thought it over, you will see that you cannot do otherwise."

"What, do you mean that I must deliver Mr. Halliburtt?"

"Just so. You can demand his release of General Beauregard, who will not refuse you."

"But if he does refuse me?"

"In that case," replied Crockston, in a deliberate tone, "we must use stronger measures, and carry off the prisoner by force."

"So," cried James Playfair, who was beginning to get angry, "so, not content with passing through the Federal fleets and forcing the blockade of Charleston, I must run out to sea again from under the cannon of the forts, and this to deliver a gentleman I know nothing of, one of those Abolitionists whom I detest, one of those journalists who shed ink instead of their blood!"

"Oh, it is but a cannon-shot more or less!" added Crockston.

"Master Crockston," said James Playfair, "mind what I say: if ever you mention this affair again to me, I will send you to the hold for the rest of the passage, to teach you manners."

Thus saying, the Captain dismissed the American, who went off murmuring, "Ah, well, I am not altogether displeased with this conversation: at any rate, the affair is broached; it will do, it will do!"

James Playfair had hardly meant it when he said an Abolitionist whom I detest; he did not in the least side with the Federals, but he did not wish to admit that the question of slavery was the predominant reason for the civil war of the United States, in spite of President Lincoln's formal declaration. Did he, then, think that the Southern States, eight out of thirty-six, were right in separating when they had been voluntarily united? Not so; he detested the Northerners, and that was all; he detested them as brothers separated from the common family—true Englishmen—who had thought it right to do what he, James Playfair, disapproved of with regard to the United States: these were the political opinions of the Captain of the *Dolphin*. But, more than this, the American war interfered with him personally, and he had a grudge against those who had caused this war; one can understand, then, how he would receive a proposition to deliver an Abolitionist,

thus bringing down on him the Confederates, with whom he pretended to do business.

However, Crockston's insinuation did not fail to disturb him; he cast the thought from him, but it returned unceasingly to his mind, and when Miss Jenny came on deck the next day for a few minutes, he dared not look her in the face.

And really it was a great pity, for this young girl, with the fair hair and sweet, intelligent face, deserved to be looked at by a young man of thirty. But James felt embarrassed in her presence; he felt that this charming creature who had been educated in the school of misfortune possessed a strong and generous soul; he understood that his silence towards her inferred a refusal to acquiesce in her dearest wishes; besides, Miss Jenny never looked out for James Playfair, neither did she avoid him. Thus for the first few days they spoke little or not at all to each other. Miss Halliburtt scarcely ever left her cabin, and it is certain she would never have addressed herself to the Captain of the *Dolphin* if it had not been for Crockston's strategy, which brought both parties together.

The worthy American was a faithful servant of the Halliburtt family; he had been brought up in his master's house, and his devotion knew no bounds. His good sense equalled his courage and energy, and, as has been seen, he had a way of looking things straight in the face. He was very seldom discouraged, and could generally find a way out of the most intricate dangers with a wonderful skill.

This honest fellow had taken it into his head to deliver Mr. Halliburtt, to employ the Captain's ship, and the Captain himself for this purpose, and to return with him to England. Such was his intention, so long as the young girl had no other object than to rejoin her father and share his captivity. It was this Crockston tried to make the Captain understand, as we have seen, but the enemy had not yet surrendered; on the contrary.

"Now," said he, "it is absolutely necessary that Miss

Jenny and the Captain come to an understanding ; if they are going to be sulky like this all the passage we shall get nothing done. They must speak, discuss ; let them dispute even, so long as they talk, and I'll be hanged if during their conversation James Playfair does not propose himself what he refused me to-day."

But when Crockston saw that the young girl and the young man avoided each other, he began to be perplexed.

"We must look sharp," said he to himself, and the morning of the fourth day he entered Miss Halliburtt's cabin, rubbing his hands with an air of perfect satisfaction.

"Good news !" cried he, "good news ! You will never guess what the Captain has proposed to me. A very noble young man he is. Now try."

"Ah !" replied Jenny, whose heart beat violently, "has he proposed to——"

"To deliver Mr. Halliburtt, to carry him off from the Confederates, and bring him to England."

"Is it true ?" cried Jenny.

"It is as I say, miss. What a good-hearted man this James Playfair is ! These English are either all good or all bad. Ah ! he may reckon on my gratitude, and I am ready to cut myself in pieces if it would please him."

Jenny's joy was profound on hearing Crockston's words. Deliver her father ! She had never dared to think of such a plan, and the Captain of the *Dolphin* was going to risk his ship and crew !

"That's what he is," added Crockston ; "and this, Miss Jenny, is well worth an acknowledgment from you."

"More than an acknowledgment," cried the young girl ; "a lasting friendship !"

And immediately she left the cabin to find James Playfair, and express to him the sentiments which flowed from her heart.

"Getting on by degrees," muttered the American.

James Playfair was pacing to and fro on the poop, and, as may be thought, he was very much surprised, not to

say amazed, to see the young girl come up to him, her eyes moist with grateful tears, and, holding out her hand to him, saying :

“ Thank you, sir, thank you for your kindness, which I should never have dared to expect from a stranger.”

“ Miss,” replied the Captain, as if he understood nothing of what she was talking, and could not understand, “ I do not know——”

“ Nevertheless, sir, you are going to brave many dangers, perhaps compromise your interests for me, and you have done so much already in offering me on board an hospitality to which I have no right whatever——”

“ Pardon me, Miss Jenny,” interrupted James Playfair, “ but I protest again I do not understand your words. I have acted towards you as any well-bred man would towards a lady, and my conduct deserves neither so many thanks nor so much gratitude.”

“ Mr. Playfair,” said Jenny, “ it is useless to pretend any longer ; Crockston has told me all ! ”

“ Ah ! ” said the Captain, “ Crockston has told you all ; then I understand less than ever the reason for your leaving your cabin, and saying these words which——”

Whilst speaking the Captain felt very much embarrassed ; he remembered the rough way in which he had received the American’s overtures, but Jenny, fortunately for him, did not give him time for further explanation ; she interrupted him, holding out her hand and saying :

“ Mr. James, I had no other object in coming on board your ship except to go to Charleston, and there, however cruel the slave-holders may be, they will not refuse to let a poor girl share her father’s prison ; that was all. I had never thought of a return as possible ; but, since you are so generous as to wish for my father’s deliverance, since you will attempt everything to save him, be assured you have my deepest gratitude.”

James did not know what to do or what part to assume ; he bit his lip ; he dared not take the hand offered him ; he

saw perfectly that Crockston had compromised him, so that escape was impossible. At the same time he had no thoughts of delivering Mr. Halliburtt, and getting complicated in a disagreeable business : but how dash to the ground the hope which had arisen in this poor girl's heart ? How refuse the hand which she held out to him with a feeling of such profound friendship ? How change to tears of grief the tears of gratitude which filled her eyes ?

So the young man tried to reply evasively, in a manner which would ensure his liberty of action for the future.

"Miss Jenny," said he, "rest assured I will do everything in my power for——"

And he took the little hand in both of his, but with the gentle pressure he felt his heart melt and his head grow confused : words to express his thoughts failed him. He stammered out some incoherent words :

"Miss—Miss Jenny—for you——"

Crockston, who was watching him, rubbed his hands, grinning and repeating to himself :

"It will come ! it will come ! it has come !"

How James Playfair would have managed to extricate himself from his embarrassing position no one knows, but fortunately for him, if not for the *Dolphin*, the man on watch was heard crying :

"Ahoy, officer of the watch !"

"What now ?" asked Mr. Mathew.

"A sail to windward !"

James Playfair, leaving the young girl, immediately sprang to the shrouds of the mainmast.

CHAPTER V

THE SHOT FROM THE "IROQUOIS," AND MISS JENNY'S ARGUMENTS

Until now the navigation of the *Dolphin* had been very fortunate. Not one ship had been signalled before the sail hailed by the man on watch.

The *Dolphin* was then in $32^{\circ} 51'$ lat., and $57^{\circ} 43'$ W. long. For forty-eight hours a fog, which now began to rise, had covered the ocean. If this mist favoured the *Dolphin* by hiding her course, it also prevented any observations at a distance being made, and, without being aware of it, she might be sailing side by side, so to speak, with the ships she wished most to avoid.

Now this is just what had happened, and when the ship was signalled she was only three miles to windward.

When James Playfair had reached the cross-trees, he saw distinctly, through an opening in the mist, a large Federal corvette in full pursuit of the *Dolphin*.

After having carefully examined her, the Captain came down on deck again, and called to the first officer.

"Mr. Mathew," said he, "what do you think of this ship?"

"I think, Captain, that it is a Federal cruiser, which suspects our intentions."

"There is no possible doubt of her nationality," said James Playfair. "Look!"

At this moment the starry flag of the North United States appeared on the gaff-yards of the corvette, and the latter asserted her colours with a cannon-shot.

"An invitation to show ours," said Mr. Mathew. "Well, let us show them; there is nothing to be ashamed of."

"What's the good?" replied James Playfair. "Our flag will hardly protect us, and it will not hinder those people from paying us a visit. No; let us go ahead."

"And go quickly," replied Mr. Mathew, "for, if my eyes do not deceive me, I have already seen that corvette lying off Liverpool, where she went to watch the ships in building: my name is not Mathew, if that is not the *Iroquois* on her taffrail."

"And is she fast?"

"One of the fastest vessels of the Federal marine."

"What guns does she carry?"

"Eight."

“ Pooh ! ”

“ Oh, don’t shrug your shoulders, Captain,” said Mr. Mathew, in a serious tone ; “ two out of those eight guns are rifled, one is a sixty-pounder on the forecastle, and the other a hundred-pounder on deck.”

“ Upon my soul ! ” exclaimed James Playfair, “ they are Parrott’s, and will carry three miles.”

“ Yes, and farther than that, Captain.”

“ Ah, well ! Mr. Mathew, let their guns be sixty or only four-pounders, and let them carry three miles or five hundred yards, it is all the same if we can go fast enough to avoid their shot. We will show this *Iroquois* how a ship can go when she is built on purpose to go. Have the fires drawn forward, Mr. Mathew.”

The first officer gave the Captain’s orders to the engineer, and soon volumes of black smoke curled from the steamer’s chimneys.

This proceeding did not seem to please the corvette, for she made the *Dolphin* the signal to lie to, but James Playfair paid no attention to this warning, and did not change his ship’s course.

“ Now,” said he, “ we shall see what the *Iroquois* will do ; here is a fine opportunity for her to try her guns. Go ahead full speed ! ”

“ Good ! ” exclaimed Mr. Mathew ; “ she will not be long in saluting us.”

Returning to the poop, the Captain saw Miss Halliburtt sitting quietly near the bulwarks.

“ Miss Jenny,” said he, “ we shall probably be chased by that corvette you see to windward, and as she will speak to us with shot, I beg to offer you my arm to take you to your cabin again.”

“ Thank you, very much, Mr. Playfair,” replied the young girl, looking at him, “ but I am not afraid of cannon-shots.”

“ However, miss, in spite of the distance, there may be some danger.”

"Oh, I was not brought up to be fearful ; they accustom us to everything in America, and I assure you that the shot from the *Iroquois* will not make me lower my head."

"You are brave, Miss Jenny."

"Let us admit, then, that I am brave, and allow me to stay by you."

"I can refuse you nothing, Miss Halliburtt," replied the Captain, looking at the young girl's calm face.

These words were hardly uttered when they saw a line of white smoke issue from the bulwarks of the corvette ; before the report had reached the *Dolphin* a projectile whizzed through the air in the direction of the steamer.

At about twenty fathoms from the *Dolphin* the shot, the speed of which had sensibly lessened, skimmed over the surface of the waves, marking its passage by a series of water-jets ; then, with another burst, it rebounded to a certain height, passed over the *Dolphin*, grazing the mizzen-yards on the starboard side, fell at thirty fathoms beyond, and was buried in the waves.

"By Jove !" exclaimed James Playfair, "we must get along ; another slap like that is not to be waited for."

"Oh !" exclaimed Mr. Mathew, "they will take some time to reload such pieces."

"Upon my honour, it is an interesting sight," said Crockston, who, with arms crossed, stood perfectly at his ease looking at the scene.

"Ah ! that's you," cried James Playfair, scanning the American from head to foot.

"It is me, Captain," replied the American, undisturbed. "I have come to see how these brave Federals fire ; not badly, in truth, not badly."

The Captain was going to answer Crockston sharply, but at this moment a second shot struck the sea on the starboard side.

"Good !" cried James Playfair, "we have already gained two cables on this *Iroquois*. Your friends sail like a buoy ; do you hear, Master Crockston ?"

"I will not say they don't," replied the American, "and for the first time in my life it does not fail to please me."

A third shot fell still farther astern, and in less than ten minutes the *Dolphin* was out of range of the corvette's guns.

"So much for patent-logs, Mr. Mathew," said James Playfair; "thanks to those shot we know how to rate our speed. Now have the fires lowered; it is not worth while to waste our coal uselessly."

"It is a good ship that you command," said Miss Halliburtt to the young Captain.

"Yes, Miss Jenny, my good *Dolphin* makes her seventeen knots, and before the day is over we shall have lost sight of that corvette."

James Playfair did not exaggerate the sailing qualities of his ship, and the sun had not set before the masts of the American ship had disappeared below the horizon.

This incident allowed the Captain to see Miss Halliburtt's character in a new light; besides, the ice was broken, henceforward, during the whole of the voyage; the interviews between the Captain and his passenger were frequent and prolonged; he found her to be a young girl, calm, strong, thoughtful, and intelligent, speaking with great ease, having her own ideas about everything, and expressing her thoughts with a conviction which unconsciously penetrated James Playfair's heart.

She loved her country, she was zealous in the great cause of the Union, and expressed herself on the civil war in the United States with an enthusiasm of which no other woman would have been capable. Thus it happened, more than once, that James Playfair found it difficult to answer her, even when questions purely mercantile arose in connection with the war: Miss Jenny attacked them none the less vigorously, and would come to no other terms whatever. At first James argued a great deal, and tried to uphold the Confederates against the Federals, to prove that the Secessionists were in the right, and that if the people were united voluntarily they might separate in the same manner. But the

young girl would not yield on this point ; she demonstrated that the question of slavery was predominant in the struggle between the North and South Americans, that it was far more a war in the cause of morals and humanity than politics, and James could make no answer. Besides, during these discussions, which he listened to attentively, it is difficult to say whether he was more touched by Miss Halliburtt's arguments or the charming manner in which she spoke ; but at last he was obliged to acknowledge, among other things, that slavery was the principal feature in the war, that it must be put an end to decisively, and the last horrors of barbarous times abolished.

It has been said that the political opinions of the Captain did not trouble him much. He would have sacrificed his most serious opinion before such enticing arguments and under like circumstances ; he made a good bargain of his ideas for the same reason, but at last he was attacked in his tenderest point ; this was the question of the traffic in which the *Dolphin* was being employed, and, consequently, the ammunition which was being carried to the Confederates.

"Yes, Mr. James," said Miss Halliburtt, "gratitude does not hinder me from speaking with perfect frankness ; on the contrary, you are a brave seaman, a clever merchant, the house of Playfair is noted for its respectability ; but in this case it fails in its principles, and follows a trade unworthy of it."

"How !" cried James, "the house of Playfair ought not to attempt such a commercial enterprise ?"

"No ! it is taking ammunition to the unhappy creatures in revolt against the government of their country, and it is lending arms to a bad cause."

"Upon my honour, Miss Jenny, I will not discuss the right of the Confederates with you ; I will only answer you with one word : I am a merchant, and as such I only occupy myself with the interests of my house ; I look for gain wherever there is an opportunity of getting it."

"That is precisely what is to be blamed, Mr. James,"

replied the young girl ; “ profit does not excuse it ; thus, when you supply arms to the Southerners, with which to continue a criminal war, you are quite as guilty as when you sell opium to the Chinese, which stupefies them.”

“ Oh, for once, Miss Jenny, this is too much, and I cannot admit——”

“ No ; what I say is just, and when you consider it, when you understand the part you are playing, when you think of the results for which you are responsible, you will yield to me in this point, as in so many others.”

James Playfair was dumfounded at these words ; he left the young girl, a prey to angry thoughts, for he felt his powerlessness to answer ; then he sulked like a child for half an hour, and an hour later he returned to the singular young girl who could overwhelm him with convincing arguments with quite a pleasant smile.

In short, however it may have come about, and although he would not acknowledge it to himself, Captain James Playfair belonged to himself no longer ; he was no longer commander-in-chief on board his own ship.

Thus, to Crockston’s great joy, Mr. Halliburtt’s affairs appeared to be in a good way ; the Captain seemed to have decided to undertake everything in his power to deliver Miss Jenny’s father, and for this he would be obliged to compromise the *Dolphin*, his cargo, his crew, and incur the displeasure of his worthy Uncle Vincent.

CHAPTER VI

SULLIVAN ISLAND CHANNEL

Two days after the meeting with the *Iroquois*, the *Dolphin* found herself abreast of the Bermudas, where she was assailed by a violent squall. These isles are frequently visited by hurricanes, and are celebrated for shipwrecks. It is here that Shakespeare has placed the exciting scene of his drama,

The Tempest, in which Ariel and Caliban dispute for the empire of the floods.

The squall was frightful ; James Playfair thought once of running for one of the Bermudas, where the English had a military post : it would have been a sad waste of time, and therefore especially to be regretted ; happily the *Dolphin* behaved herself wonderfully well in the storm, and, after flying a whole day before the tempest, she was able to resume her course towards the American coast.

But if James Playfair had been pleased with his ship, he had not been less delighted with the young girl's bravery ; Miss Halliburtt had passed the worst hours of the storm at his side, and James knew that a profound, imperious, irresistible love had taken possession of his whole being.

" Yes," said he, " this brave girl is mistress on board ; she turns me like the sea a ship in distress—I feel that I am foundering ! What will Uncle Vincent say ? Ah ! poor nature, I am sure that if Jenny asked me to throw all this cursed cargo into the sea, I should do it without hesitating, for love of her."

Happily for the firm of Playfair & Co., Miss Halliburtt did not demand this sacrifice ; nevertheless, the poor Captain had been taken captive, and Crockston, who read his heart like an open book, rubbed his hands gleefully.

" We will hold him fast ! " he muttered to himself, " and before a week has passed my master will be quietly installed in one of the best cabins of the *Dolphin*."

As for Miss Jenny, did she perceive the feelings which she inspired ? Did she allow herself to share them ? No one could say, and James Playfair least of all ; the young girl kept a perfect reserve, and her secret remained deeply buried in her heart.

But whilst love was making such progress in the heart of the young Captain, the *Dolphin* sped with no less rapidity towards Charleston.

On the 13th of January, the watch signalled land ten miles to the west. It was a low-lying coast, and almost

blended with the line of the sea in the distance. Crockston was examining the horizon attentively, and about nine o'clock in the morning he cried :

“ Charleston lighthouse ! ”

Now that the bearings of the *Dolphin* were set, James Playfair had but one thing to do, to decide by which channel he would run into Charleston Bay.

“ If we meet with no obstacles,” said he, “ before three o'clock we shall be in safety in the docks of the port.”

The town of Charleston is situated on the banks of an estuary seven miles long and two broad, called Charleston Harbour, the entrance to which is rather difficult. It is enclosed between Morris Island on the south and Sullivan Island on the north. At the time when the *Dolphin* attempted to force the blockade Morris Island already belonged to the Federal troops, and General Gillmore had caused batteries to be erected overlooking the harbour. Sullivan Island, on the contrary, was in the hands of the Confederates, who were also in possession of Moultrie Fort, situated at the extremity of the island ; therefore it would be advantageous to the *Dolphin* to go as close as possible to the northern shores to avoid the firing from the forts on Morris Island.

Five channels led into the estuary, Sullivan Island Channel, the Northern Channel, the Overall Channel, the Principal Channel, and lastly, the Lawford Channel ; but it was useless for strangers, unless they had skilful pilots on board, or ships drawing less than seven feet of water, to attempt this last ; as for Northern and Overall Channels, they were in range of the Federalist batteries, so that it was no good thinking of them. If James Playfair could have had his choice, he would have taken his steamer through the Principal Channel, which was the best, and the bearings of which were easy to follow ; but it was necessary to yield to circumstances, and to decide according to the event. Besides, the Captain of the *Dolphin* knew perfectly all the secrets of this bay, its dangers, the depths of its water at low tide, and its currents, so that he was able to steer his ship

with the greatest safety as soon as he entered one of these narrow straits. The great question was to get there.

Now this work demanded an experienced seaman, and one who knew exactly the qualities of the *Dolphin*.

In fact, two Federal frigates were now cruising in the Charleston waters. Mr. Mathew soon drew James Playfair's attention to them.

"They are preparing to ask us what we want on these shores," said he.

"Ah, well ! we won't answer them," replied the Captain, "and they will not get their curiosity satisfied."

In the meanwhile the cruisers were coming on full steam towards the *Dolphin*, who continued her course, taking care to keep out of range of their guns. But in order to gain time James Playfair made for the south-west, wishing to put the enemies' ships off their guard ; the latter must have thought that the *Dolphin* intended to make for Morris Island Channel. Now there they had batteries and guns, a single shot from which would have been enough to sink the English ship ; so the Federals allowed the *Dolphin* to run towards the south-west, contenting themselves by observing her without following closely.

Thus for an hour the respective situations of the ships did not change, for James Playfair, wishing to deceive the cruisers as to the course of the *Dolphin*, had caused the fires to be moderated, so that the speed was decreased. However, from the thick volumes of smoke which escaped from the chimneys, it might have been thought that he was trying to get his maximum pressure, and, consequently, his maximum of rapidity.

"They will be slightly astonished presently," said James Playfair, "when they see us slip through their fingers !"

In fact, when the Captain saw that he was near enough to Morris Island, and before a line of guns, the range of which he did not know, he turned his rudder quickly, and the ship resumed her northerly course, leaving the cruisers two miles to windward of her ; the latter, seeing this

manœuvre, understood the steamer's object, and began to pursue her in earnest, but it was too late. The *Dolphin* doubled her speed under the action of the screws, and distanced them rapidly. Going nearer to the coast, a few shells were sent after her as an acquittal of conscience, but the Federals were outdone, for their projectiles did not reach half-way. At eleven o'clock in the morning, the steamer ranging near Sullivan Island, thanks to her small draft, entered the narrow strait full steam; there she was in safety, for no Federalist cruiser dared follow her in this channel, the depth of which, on an average, was only eleven feet at low tide.

"How!" cried Crockston, "and is that the only difficulty?"

"Oh! oh! Master Crockston," said James Playfair, "the difficulty is not in entering, but in getting out again."

"Nonsense!" replied the American, "that does not make me at all uneasy; with a boat like the *Dolphin* and a Captain like Mr. James Playfair, one can go where one likes, and come out in the same manner."

Nevertheless, James Playfair, with telescope in his hand, was attentively examining the route to be followed. He had before him excellent coasting guides, with which he could go ahead without any difficulty or hesitation.

Once his ship was safely in the narrow channel which runs the length of Sullivan Island, James steered bearing towards the middle of Fort Moultrie as far as the Pickney Castle, situated on the isolated island of Shute's Folly; on the other side rose Fort Johnson, a little way to the north of Fort Sumter.

At this moment the steamer was saluted by some shot which did not reach her, from the batteries on Morris Island. She continued her course without any deviation, passed before Moultrieville, situated at the extremity of Sullivan Island, and entered the bay.

Soon Fort Sumter on the left protected her from the batteries of the Federalists.

This fort, so celebrated in the civil war, is situated three miles and a half from Charleston, and about a mile from each side of the bay : it is nearly pentagonal in form, built on an artificial island of Massachusetts granite ; it took ten years to construct and cost more than 900,000 dollars.

It was from this fort, on the 13th of April, 1861, that Anderson and the Federal troops were driven, and it was against it that the first shot of the Confederates was fired. It is impossible to estimate the quantity of iron and lead which the Federals showered down upon it. However, it resisted for almost three years, but a few months after the passage of the *Dolphin* it fell beneath General Gillmore's three hundred-pounders on Morris Island.

But at this time it was in all its strength, and the Confederate flag floated proudly above it.

Once past the fort, the town of Charleston appeared, lying between Ashley and Cooper Rivers.

James Playfair threaded his way through the buoys which mark the entrance of the channel, leaving behind the Charleston lighthouse, visible above Morris Island. He had hoisted the English flag, and made his way with wonderful rapidity through the narrow channels. When he had passed the quarantine buoy, he advanced freely into the centre of the bay. Miss Halliburtt was standing on the poop, looking at the town where her father was kept prisoner, and her eyes filled with tears.

At last the steamer's speed was moderated by the Captain's orders ; the *Dolphin* ranged along the end of the south and east batteries, and was soon moored at the quay of the North Commercial Wharf.

CHAPTER VII

A SOUTHERN GENERAL

The *Dolphin*, on arriving at the Charleston quay, had been saluted by the cheers of a large crowd. The inhabitants

of this town, strictly blockaded by sea, were not accustomed to visits from European ships. They asked each other, not without astonishment, what this great steamer, proudly bearing the English flag, had come to do in their waters ; but when they learned the object of her voyage, and why she had just forced the passage Sullivan, when the report spread that she carried a cargo of smuggled ammunition, the cheers and joyful cries were redoubled.

James Playfair, without losing a moment, entered into negotiation with General Beauregard, the military commander of the town. The latter eagerly received the young Captain of the *Dolphin*, who had arrived in time to provide the soldiers with the clothes and ammunition they were so much in want of. It was agreed that the unloading of the ship should take place immediately, and numerous hands came to help the English sailors.

Before quitting his ship James Playfair had received from Miss Halliburtt the most pressing injunctions with regard to her father, and the Captain had placed himself entirely at the young girl's service.

"Miss Jenny," he had said, "you may rely on me ; I will do the utmost in my power to save your father, but I hope this business will not present many difficulties. I shall go and see General Beauregard to-day, and, without asking him at once for Mr. Halliburtt's liberty, I shall learn in what situation he is, whether he is on bail or a prisoner."

"My poor father !" replied Jenny, sighing ; "he little thinks his daughter is so near him. Oh that I could fly into his arms !"

"A little patience, Miss Jenny ; you will soon embrace your father. Rely upon my acting with the most entire devotion, but also with prudence and consideration."

This is why James Playfair, after having delivered the cargo of the *Dolphin* up to the General, and bargained for an immense stock of cotton, faithful to his promise, turned the conversation to the events of the day.

"So," said he, "you believe in the triumph of the slaveholders?"

"I do not for a moment doubt of our final success, and, as regards Charleston, Lee's army will soon relieve it: besides, what do you expect from the Abolitionists? Admitting that which will never be, that the commercial towns of Virginia, the two Carolinas, Georgia, Alabama, fall under their power, what then? Will they be masters of a country they can never occupy? No, certainly not; and for my part, if they are ever victorious, they shall pay dearly for it."

"And you are quite sure of your soldiers?" asked the Captain. "You are not afraid that Charleston will grow weary of a siege which is ruining her?"

"No, I do not fear treason; besides, the traitors would be punished remorselessly, and I would destroy the town itself by sword or fire if I discovered the least Unionist movement. Jefferson Davis confided Charleston to me, and you may be sure that Charleston is in safe hands."

"Have you any Federal prisoners?" asked James Playfair, coming to the interesting object of the conversation.

"Yes, Captain," replied the General, "it was at Charleston that the first shot of separation was fired. The Abolitionists who were here attempted to resist, and, after being defeated, they have been kept as prisoners of war."

"And have you many?"

"About a hundred."

"Free in the town?"

"They were until I discovered a plot formed by them: their chief succeeded in establishing a communication with the besiegers, who were thus informed of the situation of affairs in the town. I was then obliged to lock up these dangerous guests, and several of them will only leave their prison to ascend the slope of the citadel, where ten confederate balls will reward them for their federalism."

"What! to be shot!" cried the young man, shuddering involuntarily.

"Yes, and their chief first of all. He is a very dangerous man to have in a besieged town. I have sent his letters to the President at Richmond, and before a week is passed his sentence will be irrevocably passed."

"Who is this man you speak of," asked James Playfair, with an assumed carelessness.

"A journalist from Boston, a violent Abolitionist with the confounded spirit of Lincoln."

"And his name?"

"Jonathan Halliburtt."

"Poor wretch!" exclaimed James, suppressing his emotion. "Whatever he may have done, one cannot help pitying him. And you think that he will be shot?"

"I am sure of it," replied Beauregard. "What can you expect? War is war; one must defend oneself as best one can."

"Well, it is nothing to me," said the Captain. "I shall be far enough away when this execution takes place."

"What! you are thinking of going away already?"

"Yes, General, business must be attended to; as soon as my cargo of cotton is on board I shall be out to sea again. I was fortunate enough to enter the bay, but the difficulty is in getting out again. The *Dolphin* is a good ship; she can beat any of the Federal vessels for speed, but she does not pretend to distance cannon-balls, and a shell in her hull or engine would seriously affect my enterprise."

"As you please, Captain," replied Beauregard; "I have no advice to give you under such circumstances. You are doing your business, and you are right. I should act in the same manner were I in your place; besides, a stay at Charleston is not very pleasant, and a harbour where shells are falling three days out of four is not a safe shelter for your ship; so you will set sail when you please; but can you tell me what is the number and the force of the Federal vessels cruising before Charleston?"

James Playfair did his best to answer the General, and took leave of him on the best of terms; then he returned

to the *Dolphin* very thoughtful and very depressed from what he had just heard.

"What shall I say to Miss Jenny? Ought I to tell her of Mr. Halliburtt's terrible situation? Or would it be better to keep her in ignorance of the trial which is awaiting her? Poor child!"

He had not gone fifty steps from the governor's house when he ran against Crockston. The worthy American had been watching for him since his departure.

"Well, Captain?"

James Playfair looked steadily at Crockston, and the latter soon understood he had no favourable news to give him.

"Have you seen Beauregard?" he asked.

"Yes," replied James Playfair.

"And have you spoken to him about Mr. Halliburtt?"

"No, it was he who spoke to me about him."

"Well, Captain?"

"Well, I may as well tell you everything, Crockston."

"Everything, Captain."

"General Beauregard has told me that your master will be shot within a week."

At this news anyone else but Crockston would have grown furious or given way to bursts of grief, but the American, who feared nothing, only said, with almost a smile on his lips:

"Pooh! what does it matter?"

"How! what does it matter?" cried James Playfair. "I tell you that Mr. Halliburtt will be shot within a week, and you answer, what does it matter?"

"And I mean it—if in six days he is on board the *Dolphin*, and if in seven days the *Dolphin* is on the open sea."

"Right!" exclaimed the Captain, pressing Crockston's hand. "I understand, my good fellow, you have got some pluck; and for myself, in spite of Uncle Vincent, I would throw myself overboard for Miss Jenny."

"No one need be thrown overboard," replied the

American, "only the fish would gain by that : the most important business now is to deliver Mr. Halliburtt."

"But you must know that it will be difficult to do so."

"Pooh !" exclaimed Crockston.

"It is a question of communicating with a prisoner strictly guarded."

"Certainly."

"And to bring about an almost miraculous escape."

"Nonsense," exclaimed Crockston ; "a prisoner thinks more of escaping than his guardian thinks of keeping him ; that's why, thanks to our help, Mr. Halliburtt will be saved."

"You are right, Crockston."

"Always right."

"But now what will you do ? There must be some plan : and there are precautions to be taken."

"I will think about it."

"But when Miss Jenny learns that her father is condemned to death, and that the order for his execution may come any day——"

"She will know nothing about it, that is all."

"Yes, it will be better for her and for us to tell her nothing."

"Where is Mr. Halliburtt imprisoned ?" asked Crockston.

"In the citadel," replied James Playfair.

"Just so ! . . . On board now ?"

"On board, Crockston !"

CHAPTER VIII

THE ESCAPE

Miss Jenny, sitting at the poop of the *Dolphin*, was anxiously waiting the Captain's return ; when the latter went up to her she could not utter a word, but her eyes questioned James Playfair more eagerly than her lips

could have done. The latter, with Crockston's help, informed the young girl of the facts relating to her father's imprisonment. He said that he had carefully broached the subject of the prisoners of war to Beauregard, but, as the General did not seem disposed at all in their favour, he had thought it better to say no more about it, but think the matter over again.

"Since Mr. Halliburtt is not free in the town, his escape will be more difficult ; but I will finish my task, and I promise you, Miss Jenny, that the *Dolphin* shall not leave Charleston without having your father on board."

"Thank you, Mr. James ; I thank you with my whole heart."

At these words James Playfair felt a thrill of joy through his whole being.

He approached the young girl with moist eyes and quivering lips ; perhaps he was going to make an avowal of the sentiments he could no longer repress, when Crockston interfered :

"This is no time for grieving," said he ; "we must go to work, and consider what to do."

"Have you any plan, Crockston ?" asked the young girl.

"I always have a plan," replied the American : "it is my peculiarity."

"But a good one ?" said James Playfair.

"Excellent ! and all the ministers in Washington could not devise a better ; it is almost as good as if Mr. Halliburtt was already on board."

Crockston spoke with such perfect assurance, at the same time with such simplicity, that it must have been the most incredulous person who could doubt his words.

"We are listening, Crockston," said James Playfair.

"Good ! You, Captain, will go to General Beauregard, and ask a favour of him which he will not refuse you."

"And what is that ?"

"You will tell him that you have on board a tiresome

subject, a scamp who has been very troublesome during the voyage, and excited the crew to revolt. You will ask of him permission to shut him up in the citadel ; at the same time, on the condition that he shall return to the ship on her departure, in order to be taken back to England, to be delivered over to the justice of his country."

" Good ! " said James Playfair, half smiling, " I will do all that, and Beauregard will grant my request very willingly."

" I am perfectly sure of it," replied the American.

" But," resumed Playfair, " one thing is wanting."

" What is that ? "

" The scamp."

" He is before you, Captain."

" What, the rebellious subject ? "

" Is myself ; don't trouble yourself about that."

" Oh ! you brave, generous heart," cried Jenny, pressing the American's rough hands between her small white palms.

" Go, Crockston," said James Playfair ; " I understand you, my friend ; and I only regret one thing—that is, that I cannot take your place."

" Everyone his part," replied Crockston ; " if you put yourself in my place you would be very much embarrassed, which I shall not be ; you will have enough to do later on to get out of the harbour under the fire of the Feds and Rebs, which, for my part, I should manage very badly."

" Well, Crockston, go on."

" Once in the citadel—I know it—I shall see what to do, and rest assured I shall do my best ; in the meanwhile, you will be getting your cargo on board."

" Oh, business is now a very unimportant detail," said the Captain.

" Not at all ! And what would your Uncle Vincent say to that ? We must join sentiment with work ; it will prevent suspicion ; but do it quickly. Can you be ready in six days ? "

" Yes."

"Well, let the *Dolphin* be ready to start on the 22nd."

"She shall be ready."

"On the evening of the 22nd of January, you understand, send a gig with your best men to White Point, at the end of the town ; wait there till nine o'clock, and then you will see Mr. Halliburtt and your servant."

"But how will you manage to effect Mr. Halliburtt's deliverance, and also escape yourself?"

"That's my look-out."

"Dear Crockston, you are going to risk your life then, to save my father!"

"Don't be uneasy, Miss Jenny, I shall risk absolutely nothing, you may believe me."

"Well," asked James Playfair, "when must I have you locked up?"

"To-day—you understand—I demoralise your crew ; there is no time to be lost."

"Would you like any money? It may be of use to you in the citadel."

"Money to buy the gaoler! Oh, no, it would be a poor bargain ; when one goes there the gaoler keeps the money and the prisoner! No, I have surer means than that ; however, a few dollars may be useful ; one must be able to drink, if needs be."

"And intoxicate the gaoler."

"No, an intoxicated gaoler would spoil everything. No, I tell you I have an idea ; let me work it out."

"Here, my good fellow, are ten dollars."

"It is too much, but I will return what is over."

"Well, then, are you ready?"

"Quite ready to be a downright rogue."

"Let us go to work, then."

"Crockston," said the young girl, in a faltering voice, "you are the best man on earth."

"I know it," replied the American, laughing good-humouredly. "By the by, Captain, an important item."

"What is that?"

"If the General proposes to hang your rebel—you know that military men like sharp work——"

"Well, Crockston?"

"Well, you will say that you must think about it."

"I promise you I will."

The same day, to the great astonishment of the crew, who were not in the secret, Crockston, with his feet and hands in irons, was taken on shore by a dozen sailors, and half an hour after, by Captain James Playfair's request, he was led through the streets of the town, and, in spite of his resistance, was imprisoned in the citadel.

During this and the following days the unloading of the *Dolphin* was rapidly accomplished; the steam cranes lifted out the European cargo to make room for the native goods. The people of Charleston, who were present at this interesting work, helped the sailors, whom they held in great respect, but the Captain did not leave the brave fellows much time for receiving compliments; he was constantly behind them, and urged them on with a feverish activity, the reason of which the sailors could not suspect.

Three days later, on the 18th of January, the first bales of cotton began to be packed in the hold: although James Playfair troubled himself no more about it, the firm of Playfair and Co. were making an excellent bargain, having obtained the cotton which encumbered the Charleston wharves at very far less than its value.

In the meantime no news had been heard of Crockston. Jenny, without saying anything about it, was a prey to incessant fears; her pale face spoke for her, and James Playfair endeavoured his utmost to ease her mind.

"I have all confidence in Crockston," said he; "he is a devoted servant, as you must know better than I do, Miss Jenny. You must make yourself quite at ease; believe me, in three days you will be folded in your father's arms."

"Ah! Mr. James," cried the young girl, "how can I ever repay you for such devotion? How shall we ever be able to thank you?"

"I will tell you when we are in English seas," replied the young Captain.

Jenny raised her tearful face to him for a moment, then her eyelids drooped, and she went back to her cabin.

James Playfair hoped that the young girl would know nothing of her father's terrible situation until he was in safety, but she was apprised of the truth by the involuntary indiscretion of a sailor.

The reply from the Richmond cabinet had arrived by a courier who had been able to pass the line of outposts ; the reply contained Jonathan Halliburtt's death-warrant. The news of the approaching execution was not long in spreading through the town, and it was brought on board by one of the sailors of the *Dolphin* ; the man told the Captain, without thinking that Miss Halliburtt was within hearing ; the young girl uttered a piercing cry, and fell unconscious on the deck. James Playfair carried her to her cabin, but the most assiduous care was necessary to restore her to life.

When she opened her eyes again, she saw the young Captain, who, with a finger on his lips, enjoined absolute silence. With difficulty she repressed the outburst of her grief, and James Playfair, leaning towards her, said gently :

"Jenny, in two hours your father will be in safety near you, or I shall have perished in endeavouring to save him !"

Then he left the cabin, saying to himself, "And now he must be carried off at any price, since I must pay for his liberty with my own life and those of my crew."

The hour for action had arrived, the loading of the cotton cargo had been finished since morning ; in two hours the ship would be ready to start.

James Playfair had left the North Commercial Wharf and gone into the roadstead, so that he was ready to make use of the tide, which would be high at nine o'clock in the evening.

It was seven o'clock when James left the young girl, and began to make preparations for departure. Until the present time the secret had been strictly kept between himself,

Crockston, and Jenny ; but now he thought it wise to inform Mr. Mathew of the situation of affairs, and he did so immediately.

"Very well, sir," replied Mr. Mathew, without making the least remark, "and nine o'clock is the time?"

"Nine o'clock, and have the fires lit immediately, and the steam got up."

"It shall be done, Captain."

"The *Dolphin* may remain at anchor ; we will cut our moorings and sheer off, without losing a moment."

"Just so."

"Have a lantern placed at the mainmast-head ; the night is dark, and will be foggy ; we must not risk losing our way in returning. You had better have the bell for starting rung at nine o'clock."

"Your orders shall be punctually attended to, Captain."

"And now, Mr. Mathew, have a shore-boat manned with six of our best men. I am going to set out directly for White Point. I leave Miss Jenny in your charge, and may God protect us !"

"May God protect us !" repeated the first officer.

Then he immediately gave the necessary orders for the fires to be lighted, and the shore-boat provided with men. In a few minutes the boat was ready, and James Playfair, after bidding Jenny good-bye, stepped into it, whilst at the same time he saw volumes of black smoke issuing from the chimneys of the ship, and losing itself in the fog.

The darkness was profound ; the wind had fallen, and in the perfect silence the waters seemed to slumber in the immense harbour, whilst a few uncertain lights glimmered through the mist. James Playfair had taken his place at the rudder, and with a steady hand he guided his boat towards White Point. It was a distance of about two miles ; during the day James had taken his bearings perfectly, so that he was able to make direct for Charleston Point.

Eight o'clock struck from the church of St. Philip when the shore-boat ran aground at White Point.

There was an hour to wait before the exact time fixed by Crockston ; the quay was deserted, with the exception of the sentinel pacing to and fro on the south and east batteries. James Playfair grew impatient, and the minutes seemed hours to him.

At half-past eight he heard the sound of approaching steps ; he left his men with their oars clear and ready to start, and went himself to see who it was ; but he had not gone ten feet when he met a band of coastguards, in all about twenty men. James drew his revolver from his waist, deciding to make use of it, if needs be ; but what could he do against these soldiers, who were coming on to the quay ?

The leader came up to him, and, seeing the boat, asked :
" Whose craft is that ? "

" It is a gig belonging to the *Dolphin*," replied the young man.

" And who are you ? "

" Captain James Playfair."

" I thought you had already started, and were now in the Charleston channels."

" I am ready to start. I ought even now to be on my way, but——"

" But——" persisted the coastguard.

A bright idea shot through James's mind, and he answered :

" One of my sailors is locked up in the citadel, and, to tell the truth, I had almost forgotten him ; fortunately I thought of him in time, and I have sent my men to bring him."

" Ah ! that troublesome fellow ; you wish to take him back to England ? "

" Yes."

" He might as well be hung here as there," said the coastguard, laughing at his joke.

" So I think," said James Playfair, " but it is better to have the thing done in the regular way."

“ Not much chance of that, Captain, when you have to face the Morris Island batteries.”

“ Don’t alarm yourself. I got in and I’ll get out again.”

“ Prosperous voyage to you ! ”

“ Thank you.”

With this the men went off, and the shore was left silent.

At this moment nine o’clock struck ; it was the appointed moment. James felt his heart beat violently ; a whistle was heard ; he replied to it ; then he waited, listening, with his hand up to enjoin perfect silence on the sailors. A man appeared enveloped in a large cloak, and looking from one side to another. James ran up to him.

“ Mr. Halliburtt ? ”

“ I am he,” replied the man with the cloak.

“ God be praised ! ” cried James Playfair. “ Embark without losing a minute. Where is Crockston ? ”

“ Crockston ! ” exclaimed Mr. Halliburtt, amazed. “ What do you mean ? ”

“ The man who has saved you and brought you here was your servant Crockston.”

“ The man who came with me was the gaoler from the citadel,” replied Mr. Halliburtt.

“ The gaoler ! ” cried James Playfair.

Evidently he knew nothing about it, and a thousand fears crowded in his mind.

“ Quite right, the gaoler,” cried a well-known voice. “ The gaoler is sleeping like a top in my cell.”

“ Crockston ! you ! Can it be you ? ” exclaimed Mr. Halliburtt.

“ No time to talk now, master ; we will explain everything to you afterwards. It is a question of life or death. Get in quick ! ”

The three men took their places in the boat.

“ Push off ! ” cried the captain.

Immediately the six oars dipped into the water ; the boat darted like a fish through the waters of Charleston Harbour.

CHAPTER IX

BETWEEN TWO FIRES

The boat, pulled by six robust oarsmen, flew over the water. The fog was growing dense, and it was with difficulty that James Playfair succeeded in keeping to the line of his bearings. Crockston sat at the bows, and Mr. Halliburtt at the stern, next the Captain. The prisoner, only now informed of the presence of his servant, wished to speak to him, but the latter enjoined silence.

However, a few minutes later, when they were in the middle of the harbour, Crockston determined to speak, knowing what thoughts were uppermost in Mr. Halliburtt's mind.

"Yes, my dear master," said he, "the gaoler is in my place in the cell, where I gave him two smart blows, one on the head and the other on the stomach, to act as a sleeping draught, and this when he was bringing me my supper; there is gratitude for you. I took his clothes and his keys, found you, and let you out of the citadel, under the soldiers' noses. That is all I have done."

"But my daughter——?" asked Mr. Halliburtt.

"Is on board the ship which is going to take you to England."

"My daughter there! there!" cried the American, springing from his seat.

"Silence!" replied Crockston, "a few minutes, and we shall be saved."

The boat flew through the darkness, but James Playfair was obliged to steer rather by guess, as the lanterns of the *Dolphin* were no longer visible through the fog. He was undecided what direction to follow, and the darkness was so great that the rowers could not even see to the end of their oars.

"Well, Mr. James?" said Crockston.

"We must have made more than a mile and a half,"

replied the Captain. "You don't see anything, Crockston?"

"Nothing; nevertheless, I have good eyes; but we shall get there all right. They don't suspect anything out there."

These words were hardly finished when the flash of a gun gleamed for an instant through the darkness, and vanished in the mist.

"A signal!" cried James Playfair.

"Whew!" exclaimed Crockston. "It must have come from the citadel. Let us wait."

A second, then a third shot was fired in the direction of the first, and almost the same signal was repeated a mile in front of the gig.

"That is from Fort Sumter," cried Crockston, "and it is the signal of escape. Urge on the men; everything is discovered."

"Pull for your lives, my men!" cried James Playfair, urging on the sailors, "those gun-shots cleared my route. *The Dolphin* is eight hundred yards ahead of us. Stop! I hear the bell on board. Hurrah, there it is again! Twenty pounds for you if we are back in five minutes!"

The boat skimmed over the waves under the sailors' powerful oars. A cannon boomed in the direction of the town. Crockston heard a ball whiz past them.

The bell on the *Dolphin* was ringing loudly. A few more strokes and the boat was alongside. A few more seconds and Jenny fell into her father's arms.

The gig was immediately raised, and James Playfair sprang on to the poop.

"Is the steam up, Mr. Mathew?"

"Yes, Captain."

"Have the moorings cut at once."

A few minutes later the two screws carried the steamer towards the principal channel, away from Fort Sumter.

"Mr. Mathew," said James, "we must not think of taking the Sullivan Island channel; we should run directly under the Confederate guns. Let us go as near as possible

to the right side of the harbour out of range of the Federal batteries. Have you a safe man at the helm ? ”

“ Yes, Captain.”

“ Have the lanterns and the fires on deck extinguished ; there is a great deal too much light, but we cannot help the reflection from the engine-rooms.”

During this conversation the *Dolphin* was going at a great speed ; but in altering her course to keep to the right side of the Charleston Harbour she was obliged to enter a channel which took her for a moment near Fort Sumter ; and when scarcely half a mile off all the guns bearing on her were discharged at the same time, and a shower of shot and shell passed in front of the *Dolphin* with a thundering report.

“ Too soon, stupids,” cried James Playfair, with a burst of laughter. “ Make haste, make haste, Mr. Engineer ! We shall get between two fires.”

The stokers fed the furnaces, and the *Dolphin* trembled all over with the effort of the engine as if she was on the point of exploding.

At this moment a second report was heard, and another shower of balls whizzed behind the *Dolphin*.

“ Too late, stupids,” cried the young Captain, with a regular roar.

Then Crockston, who was standing on the poop, cried, “ That’s one passed. A few minutes more, and we shall have done with the Rebs.”

“ Then do you think we have nothing more to fear from Fort Sumter ? ” asked James.

“ Nothing at all, but everything from Fort Moultrie, at the end of Sullivan Island ; but they will only get a chance at us for half a minute, and then they must choose their time well, and shoot straight if they want to reach us. We are getting near.”

“ Right ; the position of Fort Moultrie will allow us to go straight for the principal channel. Fire away then, fire away ! ”

At the same moment, and as if in obedience to James Playfair, the fort was illuminated by a triple line of lightning. A frightful crash was heard ; then a crackling sound on board the steamer.

"Touched this time !" exclaimed Crockston.

"Mr. Mathew !" cried the Captain to his second, who was stationed at the bows, "what has been damaged ?"

"The bowsprit broken."

"Any wounded ?"

"No, Captain."

"Well, then, the masts may go to Jericho. Straight into the pass ! Straight ! and steer towards the island."

"We have passed the Rebs !" cried Crockston ; "and, if we must have balls in our hull, I would much rather have the Northerners ; they are more easily digested."

In fact, the *Dolphin* could not yet consider herself out of danger ; for, if Morris Island was not fortified with the formidable pieces of artillery which were placed there a few months later, nevertheless its guns and mortars could easily have sunk a ship like the *Dolphin*.

The alarm had been given to the Federals on the island, and to the blockading squadron, by the firing from Forts Sumter and Moultrie. The besiegers could not make out the reason of this night attack ; it did not seem to be directed against them. However, they were obliged to consider it so, and were ready to reply.

It occupied James Playfair's thoughts whilst making towards the passes of Morris Island ; and he had reason to fear, for in a quarter of an hour's time lights gleamed rapidly through the darkness. A shower of small shell fell round the steamer, scattering the water over her bulwarks ; some of them even struck the deck of the *Dolphin*, but not on their points, which saved the ship from certain ruin. In fact, these shell, as it was afterwards discovered, could break into a hundred fragments, and each cover a superficial area of a hundred and twenty square feet with Greek fire, which would burn for twenty minutes, and nothing

could extinguish it. One of these shells alone could set a ship on fire. Fortunately for the *Dolphin*, they were a new invention, and as yet far from perfect. Once thrown into the air, a false rotary movement kept them inclined, and, when falling, instead of striking on their points, where is the percussion apparatus, they fell flat. This defect in construction alone saved the *Dolphin*. The falling of these shells did her little harm, and under the pressure of her over-heated boilers she continued to advance into the pass.

At this moment, and in spite of his orders, Mr. Halliburtt and his daughter went to James Playfair on the poop ; the latter urged them to return to their cabins, but Jenny declared that she would remain by the Captain. As for Mr. Halliburtt, who had just learnt all the noble conduct of his deliverer, he pressed his hand without being able to utter a word.

The *Dolphin* was speeding rapidly towards the open sea. There were only three miles more before she would be in the waters of the Atlantic ; if the pass was free at its entrance, she was saved. James Playfair was wonderfully well acquainted with all the secrets of Charleston Bay, and he guided his ship through the darkness with an unerring hand. He was beginning to think his daring enterprise successful, when a sailor on the forecastle cried :

“ A ship ! ”

“ A ship ? ” cried James.

“ Yes, on the larboard side.”

The fog had cleared off, and a large frigate was seen making towards the pass, in order to obstruct the passage of the *Dolphin*. It was necessary, cost what it might, to distance her, and urge the steam-engine to an increase of speed, or all was lost.

“ Port the helm at once ! ” cried the Captain.

Then he sprang on to the bridge above the engine. By his orders one of the screws was stopped, and under the action of the other the *Dolphin*, veering with an extraordinary rapidity, avoided running foul of the frigate, and

advanced like her to the entrance of the pass. It was now a question of speed.

James Playfair understood that in this lay his own safety, Miss Jenny's, her father's, and that of all his crew.

The frigate was considerably in advance of the *Dolphin*. It was evident from the volumes of black smoke issuing from her chimneys that she was getting up her steam. James Playfair was not the man to be left in the background.

"How are the engines?" cried he to the engineer.

"At the maximum speed," replied the latter; "the steam is escaping by all the valves."

"Fasten them down," ordered the Captain.

And his orders were executed at the risk of blowing up the ship.

The *Dolphin* again increased her speed; the pistons worked with frightful rapidity; the metal plates on which the engine was placed trembled under the terrific force of their blows. It was a sight to make the boldest shudder.

"More pressure!" cried James Playfair; "put on more pressure!"

"Impossible!" replied the engineer. "The valves are tightly closed; our furnaces are full up to the mouths."

"What difference! Fill them with cotton soaked in spirits; we must pass that frigate at any price."

At these words the most daring of the sailors looked at each other, but did not hesitate. Some bales of cotton were thrown into the engine-room, a barrel of spirits broached over them, and this expensive fuel placed, not without danger, in the red-hot furnaces. The stokers could no longer hear each other speak for the roaring of the flames. Soon the metal plates of the furnaces became red-hot; the pistons worked like the pistons of a locomotive; the steam-gauge showed a frightful tension; the steamer flew over the water; her boards creaked, and her chimneys threw out volumes of smoke mingled with flames. She was going at a headlong speed, but, nevertheless, she was gaining on the

frigate—passed her, distanced her, and in ten minutes was out of the channel.

“ Saved ! ” cried the Captain.

“ Saved ! ” echoed the crew, clapping their hands.

Already the Charleston beacon was disappearing in the south-west ; the sound of firing from the batteries grew fainter, and it might with reason be thought that the danger was all past, when a shell from a gun-boat cruising at large was hurled whizzing through the air. It was easy to trace its course, thanks to the line of fire which followed it.

Then was a moment of anxiety impossible to describe ; every one was silent, and each watched fearfully the arch described by the projectile. Nothing could be done to escape it, and in a few seconds it fell with a frightful noise on the fore-deck of the *Dolphin*.

The terrified sailors crowded to the stern, and no one dared move a step, whilst the shell was burning with a brisk cackle.

But one brave man alone among them ran up to the formidable weapon of destruction. It was Crockston ; he took the shell in his strong arms, whilst showers of sparks were falling from it ; then, with a superhuman effort, he threw it overboard.

Hardly had the shell reached the surface of the water when it burst with a frightful report.

“ Hurrah ! hurrah ! ” cried the whole crew of the *Dolphin* unanimously, whilst Crockston rubbed his hands.

Some time later the steamer sped rapidly through the waters of the Atlantic ; the American coast disappeared in the darkness, and the distant lights which shot across the horizon indicated that the attack was general between the batteries of Morris Island and the forts of Charleston Harbour.

CHAPTER X

ST. MUNGO

The next day at sunrise the American coast had disappeared ; not a ship was visible on the horizon, and the *Dolphin*, moderating the frightful rapidity of her speed, made quietly towards the Bermudas.

It is useless to recount the passage across the Atlantic, which was marked by no accidents, and ten days after the departure from Queenstown the French coast was hailed.

What passed between the Captain and the young girl may be imagined, even by the least observant individuals. How could Mr. Halliburtt acknowledge the devotion and courage of his deliverer, if it was not by making him the happiest of men ? James Playfair did not wait for English seas to declare to the father and daughter the sentiments which overflowed his heart, and, if Crockston is to be believed, Miss Jenny received his confession with a happiness she did not try to conceal.

Thus it happened that on the 14th of February, 18—, a numerous crowd was collected in the dim aisles of St. Mungo, the old cathedral of Glasgow. There were seamen, merchants, manufacturers, magistrates, and some of every denomination gathered here. There was Miss Jenny in bridal array, and beside her the worthy Crockston, resplendent in apple-green clothes, with gold buttons, whilst Uncle Vincent stood proudly by his nephew.

In short, they were celebrating the marriage of James Playfair, of the firm of Vincent Playfair & Co., of Glasgow, with Miss Jenny Halliburtt, of Boston.

The ceremony was accomplished amidst great pomp. Everyone knew the history of the *Dolphin*, and everyone thought the young Captain well recompensed for his devotion. He alone said that his reward was greater than he deserved.

In the evening there was a grand ball and banquet at

Uncle Vincent's house, with a large distribution of shillings to the crowd collected in Gordon Street. Crockston did ample justice to this memorable feast, while keeping himself perfectly within bounds.

Everyone was happy at this wedding ; some at their own happiness, and others at the happiness around them, which is not always the case at ceremonies of this kind.

Late in the evening, when the guests had retired, James Playfair took his uncle's hand.

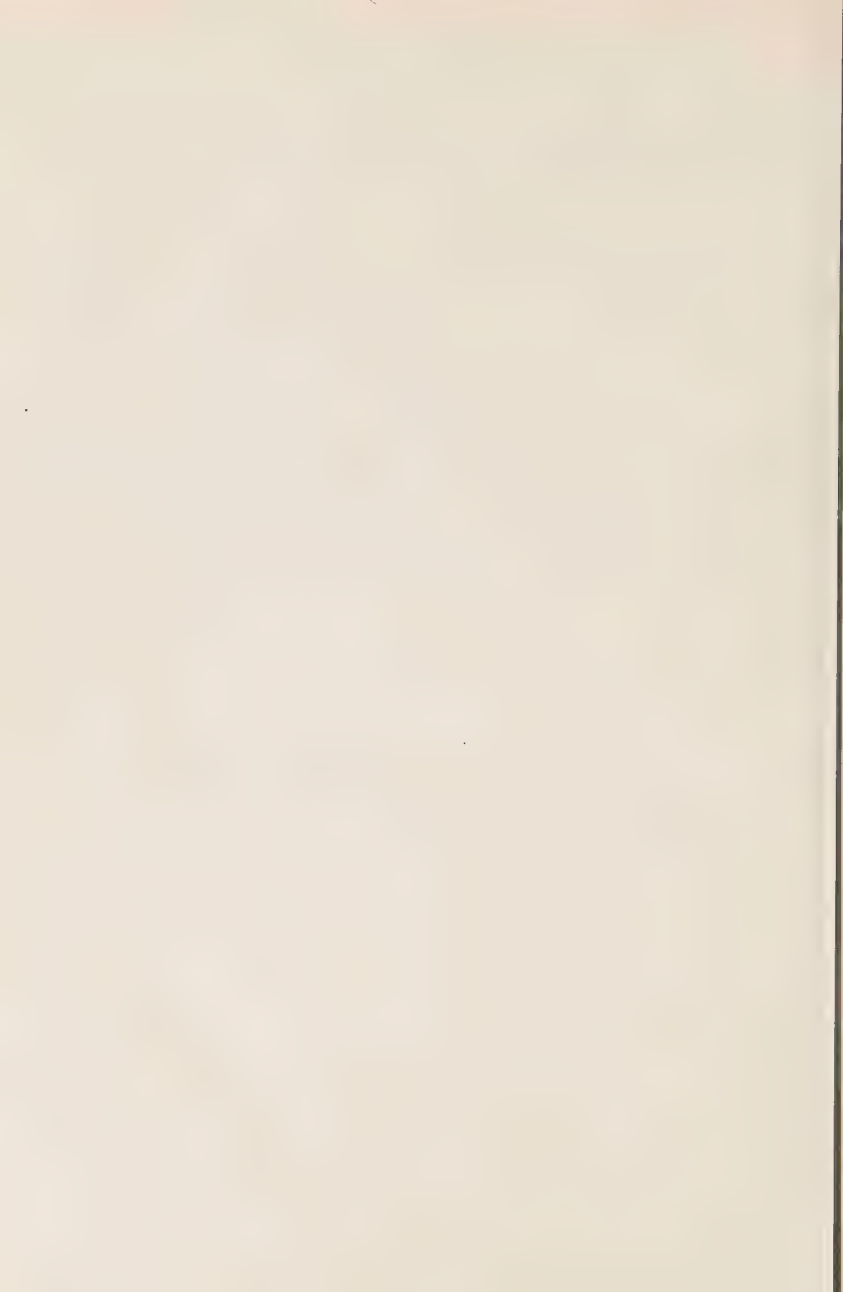
" Well, Uncle Vincent," said he to him.

" Well, Nephew James ? "

" Are you pleased with the charming cargo I brought you on board the *Dolphin* ? " continued Captain Playfair, showing him his brave young wife.

" I am quite satisfied," replied the worthy merchant ;
" I have sold my cotton at three hundred and seventy-five per cent. profit."

HECTOR SERVADAC



HECTOR SERVADAC

CHAPTER I

A CHALLENGE

“Nothing, sir, can induce me to surrender my claim.”

“I am sorry for it, Count, but in such a matter your views cannot modify mine.”

“But allow me to point out that my seniority unquestionably gives me a prior right.”

“Mere seniority, I assert, in an affair of this kind, cannot possibly entitle you to any prior claim whatever.”

“Then, Captain, no alternative is left but for me to compel you to yield at the sword’s point.”

“That’s as you please, Count ; but neither sword nor pistol can ever force me to forgo my pretensions. Here is my card.”

“And mine.”

This rapid altercation was thus brought to an end by the formal interchange of the names of the disputants. On one of the cards was inscribed :

CAPTAIN HECTOR SERVADAC,
STAFF OFFICER,
MOSTAGANEM.

On the other was the title :

COUNT WASSILI TIMASCHEFF,
ON BOARD THE SCHOONER *Dobryna*.

It did not take long to arrange that seconds should be appointed, who would meet in Mostaganem at two o’clock that day ; and the Captain and the Count were on the point of parting from each other, with a salute of punctilious courtesy, when Timascheff, as if struck by a sudden thought, said abruptly :

"Perhaps it would be better, Captain, not to allow the real cause of this to transpire?"

"Far better," replied Servadac; "it is undesirable in every way for any names to be mentioned."

"In that case, however," continued the Count, "it will be necessary to assign an ostensible pretext of some kind. Shall we allege a musical dispute? A contention in which I feel bound to defend Wagner, while you are the zealous champion of Rossini?"

"I am quite content," answered Servadac, with a smile; and, with another low bow, they parted.

The scene, as here depicted, took place upon the extremity of a little cape on the Algerian coast, between Mostaganem and Tenes, about two miles from the mouth of the Shelif. The headland rose more than sixty feet above the sea-level, and the azure waters of the Mediterranean, as they softly kissed the strand, were tinged with the reddish hue of the ferriferous rocks that formed its base. It was the 31st of December. The noontide sun, which usually illuminated the various projections of the coast with a dazzling brightness, was hidden by a dense mass of cloud, and the fog which, from some unaccountable cause, had hung for the last two months over nearly every region in the world, causing serious interruption to traffic between continent and continent, spread its dreary veil across land and sea.

After taking leave of the staff-officer, Count Wassili Timascheff wended his way down to a small creek, and took his seat in the stern of a light four-oar that had been awaiting his return; this was immediately pushed off from shore, and was soon alongside a pleasure-yacht that was lying to not many cable-lengths away.

At a sign from Servadac, an orderly, who had been standing at a respectful distance, led forward a magnificent Arabian horse; the Captain vaulted into the saddle, and, followed by his attendant, well mounted as himself, started off towards Mostaganem. It was half-past twelve when

the two riders crossed the bridge that had been recently erected over the Shelif, and a quarter of an hour later their steeds, flecked with foam, dashed through the Mascara Gate, which was one of five entrances opened in the embattled wall that encircled the town.

At that date, Mostaganem contained about fifteen thousand inhabitants, three thousand of whom were French. Besides being one of the principal district towns of the province of Oran, it was also a military station. Valuable woven fabrics, morocco leather work, articles made from the esparto (a Spanish rush), and numerous nutritive compounds were amongst its manufactures, whilst grain, cotton, wool, figs, and grapes, as well as cattle, were exported thence to France. All traces, however, had disappeared of the ancient anchorage, where, in past years, vessels had been unable to hold their own during the westerly and north-westerly gales, and Mostaganem now rejoiced in a well-sheltered harbour, which enabled her to utilise all the rich products of the Mina and the Lower Shelif. It was the existence of so good a harbour amidst the exposed cliffs of this coast that had induced the owner of the *Dobryna* to winter in these parts, and for two months the Russian standard had been seen floating from her yard, whilst on her masthead was hoisted the pennant of the French Yacht Club, with the distinctive letters M.C.W.T., the initials of Count Timascheff.

Having entered the town, Captain Servadac made his way towards Matmore, the military quarter, and was not long in finding two friends on whom he might rely—a major of the 2nd Fusileers and a captain of the 8th Artillery. The two officers listened gravely enough to Servadac's request that they would act as his seconds in an affair of honour, but could not resist a smile on hearing that the dispute between him and the Count had originated in a musical discussion. Surely, they suggested, the matter might be easily arranged; a few slight concessions on either side, and all might be amicably adjusted. But no

representations on their part were of any avail. Hector Servadac was inflexible.

“No concession is possible,” he replied, resolutely. “Rossini has been deeply injured, and I cannot suffer the injury to be unavenged. Wagner is a fool. I shall keep my word. I am quite firm.”

“Be it so, then,” replied one of the officers; “and after all, you know, a sword-cut need not be a very serious affair.”

“Certainly not,” rejoined Servadac; “and especially in my case, when I have not the slightest intention of being wounded at all.”

Incredulous as they naturally were as to the assigned cause of the quarrel, Servadac’s friends had no alternative but to accept his explanation, and, without further parley, they started for the staff office, where, at two o’clock precisely, they were to meet the seconds of Count Timascheff. Two hours later they had returned. All the preliminaries had been arranged; the Count, who, like many Russians abroad, was an aide-de-camp of the Czar, had of course proposed swords as the most appropriate weapons, and the duel was to take place on the following morning, the 1st of January, at nine o’clock, upon the cliff at a spot about a mile and a half from the mouth of the Shelif. With the assurance that they would not fail to keep their appointment with military punctuality, the two officers cordially wrung their friend’s hand and retired to the Zulma Café for a game at piquet. Captain Servadac at once retraced his steps and left the town.

For the last fortnight Servadac had not been occupying his proper lodgings in the military quarters; having been appointed to make a local levy, he had been living in a gourbi, or native hut, on the Mostaganem coast, between four and five miles from the Shelif. His orderly was his sole companion, and by any other man than the Captain the enforced exile would have been esteemed little short of a severe penance.

On his road to the gourbi, his mental occupation was a very laborious effort to put together what he was pleased to call a rondo, upon a model of versification all but obsolete. This rondo, it is unnecessary to conceal, was to be an ode addressed to a young widow by whom he had been captivated, and whom he was anxious to marry, and the tenour of his muse was intended to prove that when once a man has found an object in all respects worthy of his affections, he should love her "in all simplicity." Whether the aphorism were universally true was not very material to the gallant Captain, whose sole ambition at present was to construct a roundelay of which this should be the prevailing sentiment. He indulged the fancy that he might succeed in producing a composition which would have a fine effect here in Algeria, where poetry in that form was all but unknown.

"I know well enough," he said repeatedly to himself, "what I want to say. I want to tell her that I love her sincerely, and wish to marry her ; but, confound it ! the words won't rhyme. Plague on it ! Does nothing rhyme with ' simplicity ' ? Ah ! I have it now :

Lovers should, whoe'er they be,
Love in all simplicity.

But what next ? How am I to go on ? I say, Ben Zoof," he called aloud to his orderly, who was trotting silently close in his rear, " did you ever compose any poetry ? "

" No, Captain," answered the man promptly ; " I have never made any verses, but I have seen them made fast enough at a booth during the fête of Montmartre."

" Can you remember them ? "

" Remember them ! To be sure I can. This is the way they began :

" Come in ! come in ! you'll not repent
The entrance money you have spent ;
The wondrous mirror in this place
Reveals your future sweetheart's face."

"Bosh!" cried Servadac in disgust; "your verses are detestable trash."

"As good as any others, Captain, squeaked through a reed pipe."

"Hold your tongue, man," said Servadac peremptorily; "I have made another couplet.

"Lovers should, whoe'er they be,
Love in all simplicity;
Lover, loving honestly,
Offer I myself to thee."

Beyond this, however, the Captain's poetical genius was impotent to carry him; his further efforts were unavailing, and when at six o'clock he reached the gourbi, the four lines still remained the limit of his composition.

CHAPTER II

THE ANTECEDENTS OF CAPTAIN SERVADAC AND HIS ORDERLY, BEN ZOOF

At the time of which I am writing, there might be seen in the registers of the Minister of War the following entry:

SERVADAC (*Hector*), born at St. Trélody in the district of Lesparre, department of the Gironde, July 19th, 18——.

Property : 1,200 francs in rentes.

Length of service : Fourteen years, three months, and five days.

Service : Two years at school at St. Cyr; two years at L'Ecole d'Application; two years in the 8th Regiment of the Line; two years in the 3rd Light Cavalry; seven years in Algeria.

Campaigns : Soudan and Japan.

Rank : Captain on the staff at Mostaganem.

Decorations : Chevalier of the Legion of Honour, March 13th, 18——.

Hector Servadac was thirty years of age, an orphan without lineage and almost without means. Thirsting for glory rather than for gold, slightly scatter-brained, but warm-hearted, generous, and brave, he was eminently formed to be the protégé of the god of battles.

For the first year and a half of his existence he had been the foster-child of the sturdy wife of a vine-dresser of Médoc—a lineal descendant of the heroes of ancient prowess ; in a word, he was one of those individuals whom nature seems to have predestined for remarkable things, and around whose cradle have hovered the fairy godmothers of adventure and good luck.

In appearance Hector Servadac was quite the type of an officer ; he was rather more than five feet six inches high, slim and graceful, with dark curling hair and moustaches, well-formed hands and feet, and a clear blue eye. He seemed born to please without being conscious of the power he possessed. It must be owned, and no one was more ready to confess it than himself, that his literary attainments were by no means of a high order. “ We don’t spin tops ” is a favourite saying amongst artillery officers, indicating that they do not shirk their duty by frivolous pursuits ; but it must be confessed that Servadac, being naturally idle, was very much given to “ spinning tops.” His good abilities, however, and his ready intelligence had carried him successfully through the curriculum of his early career. He was a good draughtsman, an excellent rider—having thoroughly mastered the successor to the famous Uncle Tom at the riding-school of St. Cyr—and the records of his military service related that his name had several times been deservedly included in the order of the day.

The following episode may suffice, in a certain degree, to illustrate his character. Once, in action, he was leading a detachment of infantry through an intrenchment. They came to a place where the side-work of the trench had been so riddled by shell that a portion of it had actually

fallen in, leaving an aperture quite unsheltered from the grape-shot that was pouring in thick and fast. The men hesitated. In an instant Servadac mounted the side-work, laid himself down in the gap, and, thus filling up the breach by his own body, shouted :

“ March on ! ”

And through a storm of shot, not one of which touched the prostrate officer, the whole troop passed on in safety.

Since leaving the military college, Servadac, with the exception of his two campaigns in the Soudan and Japan, had been always stationed in Algeria. He had now a staff appointment at Mostaganem, and had lately been entrusted with some topographical work on the coast between Tenes and the Shelif. It was a matter of little consequence to him that the gourbi, in which of necessity he was quartered, was uncomfortable and ill-contrived ; he loved the open air, and the independence of his life suited him well. Sometimes he would wander on foot upon the sandy shore, and sometimes he would enjoy a ride along the summit of the cliff ; altogether being in no hurry at all to bring his task to an end. His occupation, moreover, was not so engrossing but that he could find leisure for taking a short railway journey once or twice a week ; so that he was ever and again putting in an appearance at the General's receptions at Oran, and at the fêtes given by the Governor at Algiers.

It was on one of these occasions that he had first met Madame de L——, the lady to whom he was desirous of dedicating the rondo, the first four lines of which had just seen the light. She was a colonel's widow, young and handsome, very reserved, not to say haughty in her manner, and either indifferent or impervious to the admiration which she inspired. Captain Servadac had not yet ventured to declare his attachment ; of rivals he was well aware he had not a few, and amongst these not the least formidable was the Russian Count Timascheff. And, although the young widow was all unconscious of the share she had in

the matter, it was she, and she alone, who was the cause of the challenge just given and accepted by her two ardent admirers.

During his residence in the gourbi, Hector Servadac's sole companion was his orderly, Ben Zoof. Ben Zoof was devoted, body and soul, to his superior officer. His own personal ambition was so entirely absorbed in his master's welfare that it is certain no offer of promotion—even had it been that of aide-de-camp to the Governor-General of Algiers—would have induced him to quit that master's service. His name might seem to imply that he was a native of Algeria ; but such was by no means the case. His true name was Laurent ; he was a native of Montmartre in Paris, and how or why he had obtained his patronymic was one of those anomalies which the most sagacious of etymologists would find it hard to explain.

Born on the hill of Montmartre, between the Solferino tower and the mill of La Galette, Ben Zoof had ever possessed the most unreserved admiration for his birthplace ; and to his eyes the heights and district of Montmartre represented an epitome of all the wonders of the world. In all his travels, and these had been not a few, he had never beheld scenery which could compete with that of his native home. No cathedral—not even Burgos itself—could vie with the church at Montmartre. Its race-course could well hold its own against that at Pentélique ; its reservoir would throw the Mediterranean into the shade ; its Solferino tower was far more upright than the tower of Pisa ; its forests had flourished long before the invasion of the Celts ; and its very mill produced no ordinary flour, but provided material for cakes of world-wide renown. To crown all, Montmartre boasted a mountain—a veritable mountain ; envious tongues indeed might pronounce it little more than a hill ; but Ben Zoof would have allowed himself to be hewn in pieces rather than admit that it was anything less than fifteen thousand feet in height.

Ben Zoof's most ambitious desire was to induce the

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Captain to go with him and end his days in his much-loved home ; and so incessantly were Servadac's ears besieged with descriptions of the unparalleled beauties and advantages of this eighteenth *arrondissement* of Paris, that he could scarcely hear the name of Montmartre without a conscious thrill of aversion. Ben Zoof, however, did not despair of ultimately converting the Captain, and meanwhile had resolved never to leave him. When a private in the 8th Cavalry, he had been on the point of quitting the army at twenty-eight years of age, but unexpectedly he had been appointed orderly to Captain Servadac. Side by side they fought in two campaigns. Servadac had saved Ben Zoof's life in Japan ; Ben Zoof had rendered his master a like service in the Soudan. The bond of union thus effected could never be severed ; and, although Ben Zoof's achievements had fairly earned him the right of retirement, he firmly declined all honours or any pension that might part him from his superior officer. Two stout arms, an iron constitution, a powerful frame, and an indomitable courage were all loyally devoted to his master's service, and fairly entitled him to his *soi-disant* designation of "The Rampart of Montmartre." Unlike his master, he made no pretension to any gift of poetic power, but his inexhaustible memory made him a living encyclopædia ; and for his stock of anecdotes and trooper's tales he was matchless.

Thoroughly appreciating his servant's good qualities, Captain Servadac endured with imperturbable good humour those idiosyncrasies which in a less faithful follower would have been intolerable, and from time to time he would drop a word of sympathy that served to deepen his subordinate's devotion.

On one occasion, when Ben Zoof had mounted his hobby-horse, and was indulging in high-flown praises about his beloved eighteenth *arrondissement*, the Captain had remarked gravely :

"Do you know, Ben Zoof, that Montmartre only

requires a matter of some thirteen thousand feet to make it as high as Mont Blanc ? ”

Ben Zoof's eyes glistened with delight ; and from that moment Hector Servadac and Montmartre held equal places in his affection.

CHAPTER III

INTERRUPTED EFFUSIONS

Composed of mud and loose stones, and covered with a thatch of turf and straw, known to the natives by the name of “driss,” the gourbi, though a grade better than the tents of the nomad Arabs, was yet far inferior to any habitation built of brick or stone. Little more than a hovel, the gourbi would have been quite inadequate to the needs of its present inmates if it had not adjoined an old stone hostelry, previously occupied by a detachment of engineers, and which now afforded shelter for Ben Zoof and the two horses. It still contained a considerable number of tools, such as mattocks, shovels, and pick-axes.

Uncomfortable as was their temporary abode, Servadac and his attendant made no complaints : neither of them was dainty in the matter either of board or lodging.

“Give a man a little philosophy and a good digestion, and he will thrive anywhere,” was a favourite speech of the Captain's. A true Gascon, he had his philosophy, like his pocket-money, always at hand ; and as for his digestion, it may be doubted whether the weight of all the waters of the Garonne would have caused it any inconvenience. And in this respect Ben Zoof was quite a match for his master ; the power of his gastric juices was enormous, and to any believer in the theory of metempsychosis he would appear to have had an anterior existence under the form of an ostrich, digesting pebbles as easily as he would the tenderest slice from the breast of a chicken.

The gourbi was stocked with a month's provisions,

water in abundance could be obtained from an adjacent cistern, and a little foraging was sufficient to supply the requirements of the stable, whilst all other necessities could be satisfied by the marvellous fertility of the plain between Tenes and Mostaganem, which fairly rivalled the rich country of the Mitidja. Game was pretty plentiful, and on condition that he did not allow his sport to interfere with his proper duties, the Captain, like other staff-officers, was permitted to use a fowling-piece.

On his return to the gourbi, Servadac dined with an appetite to which his long ride had given an extra sharpness. Ben Zoof's culinary efforts were somewhat remarkable : no tasteless or insipid dishes were ever the result of his preparation ; salt, pepper, vinegar, were all bestowed with a lavish hand, and it was well for both him and his master that their gastronomic powers were adequate to absorb the most pungent of condiments.

After dinner, leaving his orderly to stow away the remains of the repast in what he was pleased to term the "cup-board of his stomach," Captain Servadac turned out into the open air to smoke his pipe upon the edge of the cliff. The shades of night were drawing on. An hour previously, veiled in heavy clouds, the sun had sunk below the horizon that bounded the plain beyond the Shelif. The sky presented a most singular appearance. Towards the north, although the darkness rendered it impossible to see beyond a quarter of a mile, the upper strata of the atmosphere were suffused with a rosy glare. No well-defined fringe of light, nor arch of luminous rays, betokened a display of aurora borealis, even had such a phenomenon been possible in these latitudes ; and the most experienced meteorologist would have been puzzled to explain the cause of this striking illumination on this last evening of the passing year.

But Captain Servadac was no meteorologist, and it is to be doubted whether, since leaving school, he had ever opened his "Course of Cosmography." Besides, as he

strolled along, he had other thoughts to occupy his mind. The prospect of the morrow offered serious matter for consideration. The Captain was actuated by no personal animosity against the Count ; though rivals, the two men regarded each other with sincere respect ; they had simply reached a crisis in which one of them was *de trop* ; which of them, fate must decide.

At eight o'clock, Captain Servadac re-entered the gourbi, the single apartment of which contained his bed, a small writing-table, and some trunks that served instead of cupboards. The orderly performed his culinary operations in the adjoining building, which he also used as a bedroom, and where, extended on what he called his "good oak mattress," he would sleep soundly as a dormouse for twelve hours at a stretch. Ben Zoof had not yet received his orders to retire, and ensconcing himself in a corner of the gourbi, he endeavoured to doze—a task which the unusual agitation of his master rendered somewhat difficult. Captain Servadac was evidently in no hurry to betake himself to rest, but seating himself at his table, with a pair of compasses and a sheet of tracing-paper, he began to draw, with red and blue crayons, a variety of coloured lines, which could hardly be supposed to have much connection with a topographical survey. In truth, his character of staff-officer was now entirely absorbed into that of the Gascon poet. Whether he imagined that the compasses would bestow upon his verses the measure of a mathematical accuracy, or whether he fancied that the parti-coloured lines would lend variety to his rhythm, it is impossible to determine ; be that as it may, he was devoting all his energies to the compilation of his rondo, and supremely difficult he found the task.

"Hang it !" he ejaculated, "whatever induced me to choose this metre ? It is as hard to find rhymes as to rally fugitives in a battle. But, by all the powers ! it shan't be said that a French officer cannot cope with a piece of poetry. One battalion has shown fight—now for the rest !"

Perseverance had its reward. Presently two lines, one red, the other blue, appeared upon the paper, and the Captain murmured :

“ Words, mere words, cannot avail,
Telling true heart’s tender tale.”

“ What on earth ails my master ? ” muttered Ben Zoof ;
“ for the last hour he has been as fidgety as a bird return-
ing after its winter migration.”

Servadac suddenly started from his seat, and as he paced the room with all the frenzy of poetic inspiration, read out :

“ Empty words cannot convey
All a lover’s heart would say.”

“ Well, to be sure, he is at his everlasting verses again ! ”
said Ben Zoof to himself, as he roused himself in his corner.
“ Impossible to sleep in such a noise ” ; and he gave vent
to a loud groan.

“ How now, Ben Zoof ? ” said the Captain, sharply.
“ What ails you ? ”

“ Nothing, sir, only the nightmare.”

“ Curse the fellow, he has quite interrupted me ! ”
ejaculated the Captain. “ Ben Zoof ! ” he called aloud.

“ Here, sir ! ” was the prompt reply ; and in an instant
the orderly was upon his feet, standing in a military atti-
tude, one hand to his forehead, the other closely pressed
to his trouser-seam.

“ Stay where you are ! don’t move an inch ! ” shouted
Servadac ; “ I have just thought of the end of my
rondo.”

And in a voice of inspiration, accompanying his words
with dramatic gestures, Servadac began to declaim :

“ Listen, lady, to my vows—
O, consent to be my spouse ;
Constant ever I will be,
Constant . . . ”

No closing lines were uttered. All at once, with unutterable violence, the Captain and his orderly were dashed, face downwards, to the ground.

CHAPTER IV

A CONVULSION OF NATURE

Whence came it that at that very moment the horizon underwent so strange and sudden a modification, that the eye of the most practised mariner could not distinguish between sea and sky?

Whence came it that the billows raged and rose to a height hitherto unregistered in the records of science?

Whence came it that the elements united in one deafening crash; that the earth groaned as though the whole framework of the globe were ruptured; that the waters roared from their innermost depths; that the air shrieked with all the fury of a cyclone?

Whence came it that a radiance, intenser than the effulgence of the Northern Lights, overspread the firmament, and momentarily dimmed the splendour of the brightest stars?

Whence came it that the Mediterranean, one instant emptied of its waters, was the next flooded with a foaming surge?

Whence came it that in the space of a few seconds the moon's disc reached a magnitude as though it were but a tenth part of its ordinary distance from the earth?

Whence came it that a new blazing spheroid, hitherto unknown to astronomy, now appeared suddenly in the firmament, though it were but to lose itself immediately behind masses of accumulated cloud?

What phenomenon was this that had produced a cataclysm so tremendous in its effects upon earth, sky, and sea?

Was it possible that a single human being could have survived the convulsion? and if so, could he explain its mystery?

CHAPTER V

A MYSTERIOUS SEA

Violent as the commotion had been, that portion of the Algerian coast which is bounded on the north by the Mediterranean, and on the west by the right bank of the Shelif, appeared to have suffered little change. It is true that slight indentations were perceptible in the fertile plain, and the surface of the sea was ruffled with an agitation that was quite unusual ; but the rugged outline of the cliff was the same as heretofore, and the physical aspect of the entire scene appeared generally unaltered. The stone hostelry, with the exception of some deep clefts in its walls, had sustained little injury ; but the gourbi, like a house of cards destroyed by an infant's breath, had completely subsided, and its two inmates lay motionless, buried under the sunken thatch.

It was two hours after the catastrophe that Captain Servadac regained consciousness ; he had some trouble to collect his thoughts, and it is not altogether surprising that the first sounds that escaped his lips were the concluding words of the rondo which had been so ruthlessly interrupted :

“ Constant ever I will be,
Constant . . . ”

His next thought was to wonder what had happened ; and in order to find an answer to the question, he pushed aside the broken thatch, so that his head appeared above the *débris*.

“ The gourbi levelled to the ground ! ” he exclaimed, as he looked about him ; “ surely a waterspout has passed along the coast.”

He felt all over his body to perceive what injuries he had sustained, but not a sprain nor a scratch could he discover.

“ Where are you, Ben Zoof ? ” he shouted next.

"Here, sir!" and with military promptitude a second head protruded from the rubbish.

"Have you any notion what has happened, Ben Zoof?" asked Servadac.

"I've a notion, Captain, that it's all up with us."

"Nonsense, Ben Zoof; it is nothing but a waterspout!"

"Very good, sir," was the philosophical reply, immediately followed by the query, "Any bones broken, sir?"

"None whatever," said the Captain.

Both men were soon on their feet, and began to make a vigorous clearance of the ruins, beneath which they found that their arms, cooking utensils, and other property, had sustained little injury.

"By-the-by, what o'clock is it?" asked the Captain presently.

"It must be eight o'clock, at least," said Ben Zoof, looking at the sun, which was a considerable height above the horizon. "It is almost time for us to start."

"To start! what for?"

"To keep your appointment with Count Timascheff."

"By Jove! I had forgotten all about it!" exclaimed Servadac.

Then looking at his watch, he cried:

"What are you thinking of, Ben Zoof? It is scarcely two o'clock."

"Two in the morning, or two in the afternoon?" asked Ben Zoof, again regarding the sun.

Servadac raised his watch to his ear.

"It is going," said he; "but, by all the wines of Médoc, I am puzzled. Don't you see that the sun is in the west? It must be near setting."

"Setting, Captain! Why, it is rising finely, like a concert at the sound of the reveille. It is considerably higher since we have been talking."

Incredible as it might appear, the fact was undeniable that the sun was rising over the Shelif from that quarter of the horizon behind which it usually sank for the latter

portion of its daily round. They were utterly bewildered. Some mysterious phenomenon must not only have altered the position of the sun in the sidereal system, but must even have brought about an important modification of the earth's rotation on her axis. If Captain Servadac could now have laid hands upon a member of the Board of Longitudes, he would doubtless have sought all manner of information ; but as it was, he consoled himself with the prospect of reading an explanation of the mystery in next week's newspapers, and turned his attention to what was to him of more immediate importance.

"Come, let us be off," said he to his orderly ; "though heaven and earth be topsy-turvy, I must be at my post this morning."

"To do Count Timascheff the honour of running him through the body," added Ben Zoof.

If Servadac and his orderly had been less preoccupied, they would have noticed that a variety of other physical changes besides the apparent alteration in the movement of the sun had been evolved during the atmospheric disturbances of that New Year's night. As they descended the steep footpath leading from the cliff towards the Shelif, they were unconscious that their respiration became forced and rapid, like that of a mountaineer when he has reached an altitude where the circumambient air has become less charged with oxygen. They were also unconscious that their voices were thin and feeble ; either they must themselves have become rather deaf, or it was evident that the air had become less capable of transmitting sound.

The weather, which on the previous evening had been very foggy, had entirely changed. The sky had assumed a singular tint, and was soon covered with lowering clouds that completely hid the sun. There were, indeed, all the signs of a coming storm, but the vapour, on account of the insufficient condensation, failed to get resolved.

The sea appeared quite deserted, a most unusual circumstance along this coast, and not a sail nor a trail of

smoke broke the grey monotony of water and sky. The limits of the horizon, too, had become much circumscribed. On land, as well as on sea, the remote distance had completely disappeared, and it seemed as though the globe had assumed a more decided convexity.

At the pace at which they were walking, it was very evident that the Captain and his attendant would not take long to accomplish the three miles that lay between this gourbi and the place of rendezvous. They did not exchange a word, but each was conscious of an unusual buoyancy, which appeared to lift up their bodies and give, as it were, wings to their feet. If Ben Zoof had expressed his sensations in words, he would have said that he felt "up to anything," and he had even forgotten to taste so much as a crust of bread, a lapse of memory of which the worthy soldier was rarely guilty.

As these thoughts were crossing his mind, a harsh bark was heard to the left of the footpath, and a jackal was seen emerging from a large grove of lentisks. Regarding the two wayfayers with manifest uneasiness, the beast took up his position at the foot of a rock, more than thirty feet in height. It belonged to an African species distinguished by a black spotted skin, and a black line down the front of the legs. At night-time, when they scour the country in herds, the creatures are somewhat formidable, but singly they are no more dangerous than a dog. Though by no means afraid of them, Ben Zoof had a particular aversion to jackals, perhaps because they had no place among the fauna of his beloved Montmartre. He accordingly began to make threatening gestures, when to the unmitigated astonishment of himself and the Captain, the animal darted forward and in one single bound gained the summit of the rock.

"Good heavens!" cried Ben Zoof, "that leap must have been thirty feet at least."

"True enough," replied the Captain; "I never saw such a jump."

Meantime the jackal had seated itself upon its haunches and was staring at the two men with an air of impudent

defiance. This was too much for Ben Zoof's forbearance, and stooping down he caught up a huge stone, when, to his surprise, he found that it was no heavier than a piece of petrified sponge.

"Confound the brute!" he exclaimed, "I might as well throw a piece of bread at him. What accounts for its being as light as this?"

Nothing daunted, however, he hurled the stone into the air. It missed its aim; but the jackal, deeming it on the whole prudent to decamp, disappeared across the trees and hedges with a series of bounds which could only be likened to those that might be made by an india-rubber kangaroo. Ben Zoof was sure that his own powers of propelling must equal those of a howitzer, for his stone, after a lengthened flight through the air, fell to the ground full five hundred paces the other side of the rock.

The orderly was now some yards ahead of his master, and had reached a ditch full of water, and about ten feet wide. With the intention of clearing it, he made a spring, when a loud cry burst from Servadac:

"Ben Zoof, you idiot! What are you about? You'll break your back."

And well might he be alarmed, for Ben Zoof had sprung to a height of forty feet into the air. Fearful of the consequences that would attend the descent of his servant to *terra firma*, Servadac bounded forward, to be on the other side of the ditch in time to break his fall. But the muscular effort that he made carried him in his turn to an altitude of thirty feet; in his ascent he passed Ben Zoof, who had already commenced his downward course; and then, obedient to the laws of gravitation, he descended with increasing rapidity, and alighted upon the earth without experiencing a shock greater than if he had merely made a bound of four or five feet high. Ben Zoof burst into a roar of laughter.

"Bravo!" he said, "we should make a good pair of clowns."

But the Captain was inclined to take a more serious view of the matter. For a few seconds he stood lost in thought, then, laying his hand upon the orderly's shoulder, he said solemnly :

"Ben Zoof, I must be dreaming. Pinch me hard ; I must be either asleep or mad."

"It is very certain that something has happened to us," said Ben Zoof. "I have occasionally dreamt that I was a swallow flying over Montmartre, but I never experienced anything of this kind before ; it must be peculiar to the coast of Algeria."

Servadac was stupefied ; he felt instinctively that he was not dreaming, and yet was powerless to solve the mystery. He was not, however, the man to puzzle himself for long over any insoluble problem.

"Come what may," he presently exclaimed, "we will make up our minds for the future to be surprised at nothing."

"Right, Captain," replied Ben Zoof ; "and, first of all, let us settle our little score with Count Timascheff."

Beyond the ditch lay a small piece of meadow land, about an acre in extent. A soft and delicious herbage carpeted the soil, whilst trees of about fifty years' growth—evergreen oaks, palms, bread-fruits, sycamores, interspersed with cactuses and aloes, and topped by two or three fine specimens of the eucalyptus—formed a charming framework to the whole. No spot could have been chosen more suitable for the meeting between the two adversaries.

Servadac cast a hasty glance round the meadow. No one was in sight.

"We are the first on the field," he said.

"Not so sure of that, sir," said Ben Zoof.

"What do you mean ?" asked Servadac, looking at his watch, which he had set as near as possible by the sun before leaving the gourbi ; "it is not nine o'clock yet."

"Look up there, sir. I am much mistaken if that is not the sun" ; and as Ben Zoof spoke, he pointed directly overhead to where a faint white disc was dimly visible through the haze of clouds.

“Nonsense !” exclaimed Servadac. “How can the sun be in the zenith in the month of January, in lat. 39° N. ?”

“Can’t say, sir. I only know the sun is there ; and at the rate he has been travelling, I would lay my cap to a dish of *cous-cous*¹ that in less than three hours he will have set.”

Hector Servadac, mute and motionless, stood with folded arms. Presently he roused himself, and began to examine the various quarters of the horizon.

“What means all this ?” he murmured. “Laws of gravity disturbed ! Points of the compass reversed ! The length of day reduced one half ! Surely this will indefinitely postpone my meeting with the Count. Something has happened ; Ben Zoof and I cannot both be mad !”

The orderly, meantime, surveyed his master with the greatest equanimity ; no phenomenon, however extraordinary, would have drawn from him a single exclamation of surprise.

“Do you see any one, Ben Zoof ?” asked the Captain, at last.

“No one, sir ; the Count has evidently been and gone.”

“But supposing that to be the case,” persisted the Captain, “my seconds would have waited, and not seeing me, would have come on towards the *gourbi*. I can only conclude that they have been unable to get here ; and as for Count Timascheff——”

Without finishing his sentence, Captain Servadac, thinking it just probable that the Count, as on the previous evening, might come by water, walked to the ridge of rock that overhung the shore, in order to ascertain if the *Dobryna* were anywhere in sight. But the sea was deserted, and for the first time the Captain noticed that, although the wind was calm, the waters were unusually agitated, and seethed and foamed as though they were boiling. It was very certain that the yacht would have found a difficulty

¹ *Cous-cous* : an African dish composed of the flour of millet, with meat and the bark of the *adansonia*.

in holding her own in such a swell. Another thing that now struck Servadac was the extraordinary contraction of the horizon. Under ordinary circumstances, his elevated position would have allowed him a radius of vision at least five and twenty miles in length ; but the terrestrial sphere seemed, in the course of the last few hours, to have become considerably reduced in volume, and he could now see for a distance of only six miles in every direction.

Meantime, with the agility of a monkey, Ben Zoof had clambered to the top of a eucalyptus, and from his lofty perch was surveying the country to the south, as well as towards both Tenes and Mostaganem. On descending, he informed the Captain that the plain was entirely deserted.

“ We will make our way to the river, and get over into Mostaganem,” said the Captain.

The Shelif was not more than a mile and a half from the meadow, but no time was to be lost if the two men were to reach the town before nightfall. Though still hidden by heavy clouds, the sun was evidently declining fast ; and what was equally inexplicable, it was not following the oblique curve that in these latitudes and at this time of year might be expected, but was sinking perpendicularly on to the horizon.

As he went along, Captain Servadac pondered deeply. Perchance some unheard-of phenomenon had modified the rotatory motion of the globe ; or perhaps the Algerian coast had been transported beyond the equator into the southern hemisphere. Yet the earth (with the exception of the alteration in its convexity), in this part of Africa at least, seemed to have undergone no change of any very great importance. As far as the eye could reach, the shore was, as it had ever been, a succession of cliffs, beach, and arid rocks, tinged with a red ferruginous hue. To the south—if south, in this inverted order of things, it might still be called—the face of the country also appeared unaltered, and, three leagues away, the peaks of the Merdeyah mountains still retained their accustomed outline.

Presently a rift in the clouds gave passage to an oblique ray of light that clearly proved that the sun was setting in the east.

“ Well, I am curious to know what they think of all this at Mostaganem,” said the Captain. “ I wonder, too, what the Minister of War will say when he receives a telegram informing him that his African colony has become, not morally, but physically disorganised ; that the cardinal points are at variance with ordinary rules, and that the sun in the month of January is shining down vertically upon our heads.”

Ben Zoof, whose ideas of discipline were extremely rigid, at once suggested that the colony should be put under the surveillance of the police, that the cardinal points should be placed under restraint, and that the sun should be shot for breach of discipline.

Meantime, they were both advancing with the utmost speed. The decompression of the atmosphere made the specific gravity of their bodies extraordinarily light, and they ran like hares and leaped like chamois. Leaving the devious windings of the footpath, they went as a crow would fly, or as the Americans would say, “ took a bee’s flight ” across the country. Hedges, trees, and streams were cleared at a bound, and under these conditions Ben Zoof felt that he could have overstepped Montmartre at a single stride. The earth seemed as elastic as the springboard of an acrobat ; they scarcely touched it with their feet, and their only fear was lest the height to which they were propelled would consume the time which they were saving by their short cut across the fields.

It was not long before their wild career brought them to the right bank of the Shelif. Here they were compelled to stop, for not only had the bridge completely disappeared, but the river itself no longer existed. On the left bank there was not the slightest trace, and the right bank, which on the previous evening had bounded the yellow stream, as it murmured peacefully along the fertile plain, had now become the shore of a tumultuous ocean, its

azure waters extending westwards far as the eye could reach, and annihilating the tract of country which had hitherto formed the district of Mostaganem. The shore coincided exactly with what had been the right bank of the Shelif, and in a slightly curved line ran north and south. The catastrophe of which this part of Africa had been the scene had evidently had no effect in altering its configuration, which was still precisely identical with that laid down by the latest hydrographical survey, whilst the adjacent groves and meadows all retained their previous positions. But the river-bank had now become the shore of an unknown sea.

Eager to throw some light upon the mystery, Servadac hurriedly made his way through the oleander bushes that overhung the shore, took up some water in the hollow of his hand, and carried it to his lips.

"Salt as brine!" he exclaimed, as soon as he had tasted it. "The sea has undoubtedly swallowed up all the western part of Algeria."

"It will not last long, sir," said Ben Zoof. "It is, probably, only a severe flood."

The Captain shook his head.

"Worse than that, I fear, Ben Zoof," he replied with emotion. "It is a catastrophe that cannot fail to be attended with very serious consequences. What can have become of all my friends and fellow-officers?"

Ben Zoof was silent. Rarely had he seen his master so much agitated; and though himself inclined to receive these phenomena with philosophic indifference, his notions of military duty caused his countenance to reflect the Captain's expression of amazement.

But there was little time for Servadac to examine the changes which a few hours had wrought. The sun had already reached the eastern horizon, and just as though it were crossing the ecliptic under the tropics, it sank like a cannon-ball into the sea. Without any warning, day had rapidly given place to night, and earth, sea, and sky were immediately wrapped in profound obscurity.

CHAPTER VI

THE CAPTAIN MAKES AN EXPLORATION

Hector Servadac was not the man to remain long unnerved by any untoward event. It was part of his character to discover the why and the wherefore of everything that came under his observation, and he would have faced a cannon-ball the more unflinchingly from understanding the dynamic force by which it was propelled. Such being his temperament, it may well be imagined that he was anxious not to remain long in ignorance of the cause of the phenomena which had been so startling in their consequences.

"We must inquire into this to-morrow," he exclaimed, as darkness fell suddenly upon him. Then, after a pause, he added : "That is to say, if there is to be a to-morrow ; for if I were to be put to the torture, I could not tell what has become of the sun."

"May I ask, sir, what we are to do now ?" put in Ben Zoof.

"Stay where we are for the present ; and when daylight appears—if it ever does appear—we will explore the coast to the west and south, and return to the gourbi. If we can find out nothing else, we must at least discover where we are."

"Meanwhile, sir, may we go to sleep ?"

"Certainly, if you like, and if you can."

Nothing loath to avail himself of his master's permission, Ben Zoof crouched down in an angle of the shore, threw his arms over his eyes, and very soon slept the sleep of the ignorant, which is often sounder than the sleep of the just.

Overwhelmed by the questions that crowded upon his brain, Captain Servadac could only wander up and down the shore. Again and again he asked himself what the catastrophe could portend. Had it affected only a small portion of the continent, and had the towns of Algiers,

Oran, and Mostaganem escaped the inundation? Could he bring himself to believe that all the inhabitants, his friends, and comrades had perished; or was it not more probable that the Mediterranean had merely invaded the region of the mouth of the Shelif? But this supposition, although it might to some extent account for the disappearance of the river, did not in the least explain the other physical disturbances. Another hypothesis that presented itself to his mind was that the African coast might have been suddenly transported to the equatorial zone. But although this might get over the difficulty of the altered altitude of the sun and the absence of twilight, yet it would neither account for the sun setting in the east, nor for the length of the day being reduced from twelve hours to six.

"We must wait till to-morrow," he repeated; adding, for he had become distrustful of the future, "that is to say, if to-morrow ever comes."

Although not very learned in astronomy, Servadac was acquainted with the position of the principal constellations. It was therefore a considerable disappointment to him that, in consequence of the heavy clouds, not a star was visible in the firmament. To have ascertained that the pole-star had become displaced would have been an undeniable proof that the earth was revolving on a new axis; but not a rift appeared in the lowering clouds, which seemed to threaten torrents of rain.

It happened that the moon was new on that very day; naturally, therefore, it would have set at the same time as the sun. What, then, was the Captain's bewilderment when, after he had been walking for about an hour and a half, he noticed on the western horizon a strong glare that penetrated even the masses of the clouds.

"The moon in the west!" he cried aloud; but suddenly bethinking himself, he added. "But no, that cannot be the moon; unless she had shifted very much nearer the earth, she could never give a light as intense as this."

And as he spoke the screen of vapour was illuminated to such a degree that the whole country was as it were bathed in twilight.

"What can this be?" soliloquised the Captain. "It cannot be the sun, for the sun set in the east only an hour and a half ago. Would that those clouds would disclose what enormous luminary lies behind them! What a fool I was not to have learnt more astronomy! Perhaps, after all, I am racking my brain over something that is quite in the ordinary course of nature."

But, reason as he might, the mysteries of the heavens still remained impenetrable. For about an hour some luminous body, its disc evidently of gigantic dimensions, shed its rays upon the upper strata of the clouds; then, marvellous to relate, instead of obeying the ordinary laws of celestial mechanism and descending upon the opposite horizon, it seemed to rise in a line perpendicular to the plane of the equator, and vanished.

The darkness that returned to the face of the earth was not more profound than the gloom which fell upon the Captain's soul. Everything was incomprehensible. The simplest mechanical rules seemed falsified; the planets had defied the laws of gravitation; the motions of the celestial spheres were erroneous as those of a watch with a defective mainspring, and there was only too much reason to fear that the sun would never again shed his radiance upon the earth.

But the Captain's fears were groundless. In three hours' time, without any intervening twilight, the morning sun made its appearance in the west, and day once more had dawned. On consulting his watch, Servadac found that night had lasted precisely six hours. Ben Zoof, who was unaccustomed to so brief a period of repose, was still slumbering soundly.

"Come, wake up!" said Servadac, shaking him by the shoulder; "it is time to start."

"Time to start?" exclaimed Ben Zoof, rubbing his eyes. "I feel as if I had only just gone to sleep."

"You have slept all night, at any rate," replied the Captain ; "it has only been for six hours, but you must make it enough."

"Enough it shall be, sir," was the submissive rejoinder.

"And now," continued Servadac, "we will take the shortest way back to the gourbi, and see what our horses think about it all."

"They will think that they ought to be groomed," said the orderly.

"Very good ; you may groom them and saddle them as quickly as you like. I want to know what has become of the rest of Algeria : if we cannot get round by the south to Mostaganem, we must go eastward to Tenes."

And forthwith they started. Beginning to feel hungry, they had no hesitation in gathering figs, dates, and oranges from the plantations that formed a continuous rich and luxuriant orchard along their path. The district was quite deserted, and they had no reason to fear any legal penalty for their depredations.

In an hour and a half they reached the gourbi. Everything was just as they had left it, and it was evident that no one had visited the place during their absence. All was desolate as the shore they had quitted.

The preparations for the expedition were brief and simple. Ben Zoof saddled the horses and filled his pouch with biscuits and game ; water, he felt certain, could be obtained in abundance from the numerous affluents of the Shelif, which, although they had now become tributaries of the Mediterranean, still meandered through the plain. Captain Servadac mounted his horse Zephyr, and Ben Zoof simultaneously got astride his mare Galette, named after the mill of Montmartre. They galloped off in the direction of the Shelif, and were not long in discovering that the diminution in the pressure of the atmosphere had precisely the same effect upon their horses as it had had upon themselves. Their muscular strength seemed five times as great as hitherto ; their hoofs scarcely touched the

ground, and they seemed transformed from ordinary quadrupeds into veritable hippogriffs. Happily, Servadac and his orderly were fearless riders ; they made no attempt to curb their steeds, but even urged them to still greater exertions. Twenty minutes sufficed to carry them over the four or five miles that intervened between the gourbi and the mouth of the Shelif ; then, slackening their speed, they proceeded at a more leisurely pace to the south-east, along what had once been the right bank of the river, but which, although it still retained its former characteristics, was now the boundary of a sea, which extending farther than the limits of the horizon, must have swallowed up at least a large portion of the province of Oran. Captain Servadac knew the country well ; he had at one time been engaged upon a trigonometrical survey of the district, and consequently had an accurate knowledge of its topography. His idea now was to draw up a report of his investigations : to whom that report should be delivered was a problem he had yet to solve.

During the four hours of daylight that still remained, the travellers rode about twenty-one miles from the river mouth. To their vast surprise, they did not meet a single human being. At nightfall they again encamped in a slight bend of the shore, at a point which on the previous evening had faced the mouth of the Mina, one of the left-hand affluents of the Shelif, but now absorbed into the newly revealed ocean. Ben Zoof made the sleeping accommodation as comfortable as the circumstances would allow ; the horses were clogged and turned out to feed upon the rich pasture that clothed the shore, and the night passed without special incident.

At sunrise on the following morning, the 2nd of January, or what, according to the ordinary calendar, would have been the night of the 1st, the Captain and his orderly remounted their horses, and during the six-hours' day accomplished a distance of forty-two miles. The right bank of the river still continued to be the margin of the land, and

only in one spot had its integrity been impaired. This was about twelve miles from the Mina, and on the site of the annex or suburb of Surkelmittoo. Here a large portion of the bank had been swept away, and the hamlet, with its eight hundred inhabitants, had no doubt been swallowed up by the encroaching waters. It seemed, therefore, more than probable that a similar fate had overtaken the larger towns beyond the Shelif, and that Mazagran, Mostaganem, and Orleansville had all been annihilated. After skirting the small bay thus formed by the rupture of the shore, Captain Servadac found himself again upon the river bank, exactly opposite the site once occupied by the mixed community of Anni-Moossa, the ancient Khamis of Beni-Ooragh ; but not a vestige of the place remained. Even the Mankara Peak, below which it had been built, and which was more than three thousand feet in height, had totally disappeared.

In the evening the explorers encamped, as previously, in a nook of the shore which here abruptly terminated their new domain, not far from where they might have expected to find the important village of Memounturroy ; but of this, too, there was now no trace.

"I had quite reckoned upon a supper and a bed at Orleansville to-night," said Servadac, as, full of despondency, he surveyed the drear waste of water.

"Quite impossible," replied Ben Zoof, "except you had gone by a boat. But cheer up, sir, cheer up ; we will soon devise some means for getting across to Mostaganem."

"If, as I hope," rejoined the Captain, "we are on a peninsula, we are more likely to get to Tenes ; there we shall hear the news."

"Far more likely to carry the news ourselves," answered Ben Zoof, as he threw himself down for his night's rest.

Six hours later, only waiting for sunrise, Captain Servadac set himself in movement again to renew his investigations. At the spot last chosen for encampment,

the shore, that hitherto had been running in a south-easterly direction, turned abruptly to the north, being no longer formed by the natural bank of the Shelif, but consisting of an absolutely new coast-line. No land was in sight. Nothing could be seen of Orleansville, which ought to have been about six miles to the south-west ; and Ben Zoof, who had mounted the highest point of view attainable, could distinguish sea, and nothing but sea, to the farthest horizon.

Quitting their encampment and riding on, the bewildered explorers kept close to the new shore. This, since it had ceased to be formed by the original river-bank, had considerably altered its aspect. Frequent landslips occurred, and in many places deep chasms rifted the ground ; great gaps furrowed the fields, and trees, half uprooted, overhung the water—some old olives being especially remarkable by the fantastic distortions of their gnarled trunks, looking as though they had been chopped by a hatchet.

The sinuosities of the coast-lines, alternately gully and headland, had the effect of making a devious progress for the travellers, and at sunset, although they had accomplished more than twenty miles, they had only just arrived at the foot of the Merdeyah Mountains, which, before the cataclysm, had formed the extremity of the chain of the Little Atlas. The ridge, however, had been violently ruptured, and now rose perpendicularly from the water.

On the following morning Servadac and Ben Zoof traversed one of the mountain gorges ; and next, in order to make a more thorough acquaintance with the limits and condition of the section of Algerian territory of which they seemed to be left as the sole occupants, they dismounted, and proceeded on foot to the summit of one of the highest peaks. From this elevation they ascertained that from the base of the Merdeyah to the Mediterranean, a distance of about eighteen miles, a new coast-line had come into existence ; no land was visible in any direction ; no isthmus existed to form a connecting link with the

territory of Tenes, which had entirely disappeared. The result was that Captain Servadac was driven to the irresistible conclusion that the tract of land which he had been surveying was not, as he had at first imagined, a peninsula ; it was actually an island.

Strictly speaking, this island was quadrilateral, but the sides were so irregular that it was much more nearly a triangle, the comparison of the sides exhibiting these proportions :—The section of the right bank of the Shelif, seventy-two miles ; the northern boundary from the Shelif to the chain of the Little Atlas, twenty-one miles ; from the Little Atlas to the shore of the Mediterranean, eighteen miles ; and sixty miles of the shore of the Mediterranean itself, making in all an entire circumference of about 171 miles.

“ What does it all mean ? ” exclaimed the Captain, every hour growing more and more bewildered.

“ The will of Providence, and we must submit,” replied Ben Zoof, calm and undisturbed.

With this reflection, the two men silently descended the mountain and remounted their horses, which had been grazing quietly on the luxuriant herbage.

Before evening the wayfarers had reached the Mediterranean. On their road they failed to discern a vestige of the little town of Montenotte ; like Tenes (of which not so much as a ruined cottage was visible on the horizon), it seemed to be annihilated.

On the following day, the 6th of January, the two men made a forced march along the coast of the Mediterranean, which they found in some degree less altered than the Captain had at first supposed ; but four villages, Callaat-Chimah, Agniss, Marabout, and Pointe-Basse, had entirely disappeared, and the headlands, unable to resist the shock of the convulsion, had been detached from the mainland.

The circuit of the island had been now completed, and the explorers, after a period of sixty hours, found themselves once more beside the ruins of their gourbi. Five

days, or what, according to the established order of things, would have been two days and a half, had been occupied in tracing the boundaries of their new domain ; and although not the only living occupants, inasmuch as herds of cattle had been seen, they had ascertained beyond a doubt that they were the sole human inhabitants left upon the island.

“ Well, sir, here you are, Governor-General of Algeria ! ” exclaimed Ben Zoof, as they reached the gourbi.

“ With not a soul to govern,” gloomily rejoined the Captain.

“ How so ? Do you not reckon me ? ”

“ Pshaw ! Ben Zoof, what are you ? ”

“ What am I ? Why, I am the population.”

The Captain deigned no reply, but muttering some expressions of regret for the fruitless trouble he had taken about his rondo, betook himself to rest.

CHAPTER VII

BEN ZOOF WATCHES IN VAIN

IN a few minutes the Governor-General and his population were asleep. The gourbi being in ruins, they were obliged to put up with the best accommodation they could find in the adjacent erection. It must be owned that the Captain's slumbers were by no means sound ; he was agitated by the consciousness that he had hitherto been unable to account for his strange experiences by any reasonable theory. Though far from being advanced in the knowledge of natural philosophy, he had been instructed, to a certain degree, in its elementary principles ; and, by an effort of memory, he managed to recall some general laws which he had almost forgotten. He could understand that an altered inclination of the earth's axis with regard to the ecliptic would introduce a change of position in the cardinal points, and bring about a displacement of the sea ; but the

hypothesis entirely failed to account, either for the shortening of the days, or for the diminution in the pressure of the atmosphere. He felt that his judgment was utterly baffled ; his only remaining hope was that the chain of marvels was not yet complete, and that something further might occur which would throw some light upon the mystery.

Ben Zoof's first care on the following morning was to provide a good breakfast. To use his own phrase, he was as hungry as the whole population of three million Algerians, of whom he was the representative, and he must have enough to eat. The catastrophe which had overwhelmed the country had left a dozen eggs uninjured, and upon these, with a good dish of his famous cous-cous, he hoped that he and his master might have a sufficiently substantial meal. The stove was ready for use, the copper skillet was as bright as hands could make it, and the beads of condensed steam upon the surface of a large stone alcaraza gave evidence that it was supplied with water. Ben Zoof at once proceeded to light a fire, singing all the time, according to his wont, a snatch of an old military refrain :

“ Veal ! veal ! is there any veal,
Enough to make a stew ?
Salt ! salt ! is there any salt,
To season what we do ? ”

Ever on the look-out for fresh phenomena, Captain Servadac watched the preparations with a curious eye. It struck him that perhaps the air, in its strangely modified condition, would fail to supply sufficient oxygen, and that the stove, in consequence, might not fulfil its function. But no ; the fire was lighted just as usual, and fanned into vigour by Ben Zoof applying his mouth in lieu of bellows, and a bright flame started up from the midst of the twigs and coal. The skillet was duly set upon the stove, and Ben Zoof was prepared to wait awhile for the water to boil. Taking up the eggs, he was surprised to notice that they hardly weighed more than they would if they had been

mere shells ; but he was still more surprised when he saw that before the water had been two minutes over the fire it was at full boil.

“ By jingo ! ” he exclaimed, “ this is a precious hot fire ! ”

Servadac reflected. In a few moments he said :

“ It cannot be that the fire is hotter ; the peculiarity must be in the water.”

And taking down a centigrade thermometer, which he had hung upon the wall, he plunged it into the skillet. Instead of 100°, he found that the instrument registered only 66°.

“ Take my advice, Ben Zoof,” he said : “ leave your eggs in the saucepan a good quarter of an hour.”

“ Boil them hard ! That will never do,” objected the orderly.

“ You will not find them hard, my good fellow. Trust me, we shall be able to dip our sippets into the yolks easily enough.”

The Captain was quite right in his conjecture, that this new phenomenon was caused by a diminution in the pressure of the atmosphere. Water boiling at a temperature of 66° was itself an evidence that the column of air above the earth's surface had become reduced by one-third of its altitude. The identical phenomenon would have occurred at the summit of a mountain 35,000 feet high ; and had Servadac been in possession of a barometer he would have immediately discovered the fact that only now for the first time, as the result of experiment, revealed itself to him—a fact, moreover, which accounted for the compression of the blood-vessels which both he and Ben Zoof had experienced, as well as for the attenuation of their voices and their accelerated breathing.

“ And yet,” he argued with himself, “ if our encampment has been projected to so great an elevation, how is it that the sea remains at its proper level ? ”

Once again Hector Servadac, though capable of tracing consequences, felt himself totally at a loss to comprehend

their cause ; hence his agitation and bewilderment ! *Inde iræ !*

After their prolonged immersion in the boiling water, the eggs were found to be only just sufficiently cooked ; the cous-cous was very much in the same condition ; and Ben Zoof came to the conclusion that in future he must be careful to commence his culinary operations an hour earlier than he had been accustomed. He was rejoiced at last to help his master, who, in spite of his perplexed pre-occupation, seemed to have a very fair appetite for breakfast.

“ Well, Captain ? ” said Ben Zoof presently, such being his ordinary way of opening conversation.

“ Well, Ben Zoof ? ” was the Captain’s invariable response to his servant’s formula.

“ What are we to do now, sir ? ”

“ We can only for the present wait patiently where we are. We are encamped upon an island, and therefore we can only be rescued by sea.”

“ But do you suppose that any of our friends are still alive ? ” asked Ben Zoof.

“ Oh, I think we must indulge the hope that this catastrophe has not extended far. We must trust that it has limited its mischief to some small portion of the Algerian coast, and that our friends are all alive and well. No doubt the Governor-General will be anxious to investigate the full extent of the damage that has been done, and will send a vessel from Algiers to explore. It is not likely that we shall be forgotten. What, then, you have to do, Ben Zoof, is to keep a sharp look-out, and to be ready, in case a vessel should appear, to make signals at once.”

“ But if no vessel should appear ! ” sighed the orderly.

“ Then we must build a boat, and go in search of those who do not come in search of us.”

“ Very good, Captain. But what sort of a sailor are you ? ”

“ Every one can be a sailor when he must,” said Servadac, calmly.

Ben Zoof said no more. For several succeeding days he scanned the horizon unintermittently with his telescope. His watching was all in vain. No ship appeared upon the desert sea.

"By the name of a Kabyle !" he broke out impatiently. "his Excellency is grossly negligent !"

Although the days and nights had become reduced from twenty-four hours to twelve, Captain Servadac would not accept the new condition of things, but resolved to adhere to the computations of the old calendar. Notwithstanding, therefore, that the sun had risen and set twelve times since the commencement of the new year, he persisted in calling the following day the 6th of January. His watch enabled him to keep an accurate account of the passing hours. On a pendulum clock, the diminution of atmospheric pressure would no doubt have caused a large disturbance ; but the spring of a good watch would be insensibly affected by the change of condition, and, once regulated to the new physical status, might be expected to act with fair precision.

In the course of his life, Ben Zoof had read a few books. After sitting pondering one day, he said :

"It seems to me, Captain, that you have turned into Robinson Crusoe, and that I am your man Friday. I hope I have not become a nigger."

"No," replied the Captain. "Your complexion isn't the fairest in the world, but you are not a nigger yet."

"Well, I had much sooner be a white Friday than a black one," rejoined Ben Zoof.

Still no ship appeared ; and Captain Servadac, after the example of all previous Crusoes, began to consider it advisable to investigate the resources of his domain. The new territory of which he had become the monarch he named Gourbi Island. It had a superficial area of about nine hundred square miles. Bullocks, cows, goats, and sheep existed in considerable numbers ; and as there seemed already to be an abundance of game, it was hardly likely that a future supply would fail them. The condition

of the cereals was such as to promise a fine ingathering of wheat, maize, and rice ; so that for the governor and his population, with their two horses, not only was there ample provision, but even if other human inhabitants besides themselves should yet be discovered, there was not the remotest prospect of any of them perishing by starvation.

From the 6th to the 13th of January the rain came down in torrents ; and, what was quite an unusual occurrence at this season of the year, several heavy storms broke over the island. In spite, however, of the continual downfall, the heavens still remained veiled in cloud. Servadac, moreover, did not fail to observe that for the season the temperature was unusually high ; and, as a matter still more surprising, that it kept steadily increasing, as though the earth were gradually and continuously approximating to the sun. In proportion to the rise of temperature, the light also assumed greater intensity ; and if it had not been for the screen of vapour interposed between the sky and the island, the irradiation which would have illumined all terrestrial objects would have been vivid beyond all precedent.

But neither sun, moon, nor star ever appeared ; and Servadac's irritation and annoyance at being unable to identify any one point of the firmament may be more readily imagined than described. On one occasion Ben Zoof endeavoured to mitigate his master's impatience by exhorting him to assume the resignation, even if he did not feel the indifference, which he himself experienced ; but his advice was received with so angry a rebuff that he retired in all haste, abashed, to resume his watchman's duty, which he performed with exemplary perseverance. Day and night, with the shortest possible intervals of rest, despite wind, rain, and storm, he mounted guard upon the cliff—but all in vain. Not a speck appeared upon the desolate horizon. To say the truth, no vessel could have stood against the weather. The hurricane raged with tremendous fury, and the waves rose to a height that

seemed to defy calculation. Never, even in the second era of creation, when, under the influence of internal heat, the waters rose in vapour to descend in deluge back upon the world, could meteorological phenomena have been developed with more impressive intensity.

But by the night of the 13th the tempest appeared to have spent its fury ; the wind dropped ; the rain ceased as if by a spell ; and Servadac, who for the last six days had confined himself to the shelter of his roof, hastened to join Ben Zoof at his post upon the cliff. Now, he thought, there might be a chance of solving his perplexity ; perhaps now the huge disc, of which he had had an imperfect glimpse on the night of the 31st of December, might again reveal itself ; at any rate, he hoped for an opportunity of observing the constellations in a clear firmament above.

The night was magnificent. Not a cloud dimmed the lustre of the stars, which spangled the heavens in surpassing brilliancy, and several nebulae which hitherto no astronomer had been able to discern without the aid of a telescope were clearly visible to the naked eye.

By a natural impulse, Servadac's first thought was to observe the position of the pole-star. It was in sight, but so near to the horizon as to suggest the utter impossibility of its being any longer the central pivot of the sidereal system ; it occupied a position through which it was out of the question that the axis of the earth indefinitely prolonged could ever pass. In his impression he was more thoroughly confirmed when, an hour later, he noticed that the star had sensibly approached still nearer the horizon, as though it had belonged to one of the zodiacal constellations.

The pole-star being manifestly thus displaced, it remained to be discovered whether any other of the celestial bodies had become a fixed centre around which the constellations made their apparent daily revolutions. To the solution of this problem Servadac applied himself with the most thoughtful diligence. After patient observation, he satisfied himself that the required conditions were answered

by a certain star that was stationary not far from the horizon. This was Vega, in the constellation Lyra, a star which, according to the procession of the equinoxes, will take the place of our pole-star 12,000 years hence. The most daring imagination could not suppose that a period of 12,000 years had been crowded into the space of a fortnight; and therefore the Captain came, as to an easier conclusion, to the opinion that the earth's axis had been suddenly and immensely shifted; and from the fact that the axis, if produced, would pass through a point so little removed above the horizon, he deduced the inference that the Mediterranean must have been transported to the equator.

Lost in bewildering maze of thought, he gazed long and intently upon the heavens. His eyes wandered from where the tail of the Great Bear, now a zodiacal constellation, was scarcely visible above the waters, to where the stars of the southern hemisphere were just breaking on his view. A cry from Ben Zoof recalled him to himself.

"The moon!" shouted the orderly, as though overjoyed at once again beholding what the poet has called:

"The kind companion of terrestrial night;"

and he pointed to a disc that was rising at a spot precisely opposite the place where they would have expected to see the sun.

"The moon!" again he cried.

But Captain Servadac could not altogether enter into his servant's enthusiasm. If this were actually the moon, her distance from the earth must have been increased by some millions of miles. He was rather disposed to suspect that it was not the earth's satellite at all, but some planet with its apparent magnitude greatly enlarged by its approximation to the earth. Taking up the powerful field-glass which he was accustomed to use in his surveying operations, he proceeded to investigate more carefully the

character of the luminous orb. But he failed to trace any of the lineaments, supposed to resemble a human face, that mark the lunar surface ; he failed to decipher any indications of hill and plain ; nor could he make out the aureole of light which emanates from what astronomers have designated Mount Tycho.

“ It is not the moon,” he said, slowly.

“ Not the moon ? ” cried Ben Zoof. “ Why not ? ”

“ It is not the moon,” again affirmed the Captain.

“ Why not ? ” repeated Ben Zoof, unwilling to renounce his first impression.

“ Because there is a small satellite in attendance.”

And the Captain drew his servant’s attention to a bright speck (apparently about the size of one of Jupiter’s satellites seen through a moderate telescope) that was clearly visible just within the focus of his glass.

Here, then, was a fresh mystery. The orbit of the planet was assuredly interior to the orbit of the earth, because it accompanied the sun in its apparent motion ; yet it was neither Mercury nor Venus, because neither one nor the other of these has any satellite at all.

The Captain stamped and stamped again with mingled vexation, agitation, and bewilderment.

“ Confound it ! ” he cried, “ if this is neither Venus nor Mercury, it must be the moon ; but if it is the moon, whence, in the name of all the gods, has she picked up another moon for herself ? ”

The Captain was in dire perplexity.

CHAPTER VIII

VENUS IN PERILOUS PROXIMITY

THE light of the returning sun soon extinguished the glory of the stars, and rendered it necessary for the Captain to postpone his observations until future cloudless nights. He had sought in vain for further trace of the huge disc that

had so excited his wonder on the 1st, and it seemed most probable that, in its irregular orbit, it had been carried beyond the range of vision.

The weather was still superb. The wind, after veering to the west, had sunk to a perfect calm. Pursuing its inverted course, the sun rose and set with undeviating regularity ; and the days and nights were still divided into periods of precisely six hours each—a sure proof that the sun remained close to the new equator which manifestly passed through Gourbi Island.

Meanwhile the temperature was steadily increasing. The Captain kept his thermometer close at hand where he could repeatedly consult it, and on the 15th he found that it registered 50° centigrade in the shade.

No attempt had been made to rebuild the gourbi, but the Captain and Ben Zoof managed to make up quarters sufficiently comfortable in the principal apartment of the adjoining structure, where the stone walls, that at first afforded a refuge from the torrents of rain, now formed an equally acceptable shelter from the burning sun. The heat was becoming insufferable, surpassing the heat of Senegal and other equatorial regions ; not a cloud ever tempered the intensity of the solar rays ; and unless some modification ensued, it seemed inevitable that all vegetation should become scorched and burnt off from the face of the island.

In spite, however, of the profuse perspirations from which he suffered, Ben Zoof, constant to his principles, expressed no surprise at the unwonted heat. No remonstrances from his master could induce him to abandon his watch from the cliff. To withstand the vertical beams of that noontide sun would seem to require a skin of brass and a brain of adamant ; but yet, hour after hour, he would remain conscientiously scanning the surface of the Mediterranean, which, calm and deserted, lay outstretched before him. On one occasion Servadac, in reference to his orderly's indomitable perseverance, happened to remark that he thought he must have been born on the banks of the

Gaboon, in the heart of equatorial Africa ; to which Ben Zoof replied, with the utmost dignity, that he was born at Montmartre, which was all the same. The worthy fellow was unwilling to own that, even in the matter of heat, the tropics could in any way surpass his own much-loved home.

This unprecedented temperature very soon began to take effect upon the products of the soil. The sap rose rapidly in the trees, so that in the course of a few days buds, leaves, flowers, and fruit had come to full maturity. It was the same with the cereals : wheat and maize sprouted and ripened as if by magic, and for a while a rank and luxuriant pasturage clothed the meadows. Summer and autumn seemed blended into one. If Captain Servadac had been more deeply versed in astronomy, he would perhaps have been able to bring to bear his knowledge that if the axis of the earth, as everything seemed to indicate, now formed a right angle with the plane of the ecliptic, her various seasons, like those of the planet Jupiter, would become limited to certain zones, in which they would remain invariable. But even if he had understood the *rationale* of the change, the convulsion that had brought it about would have been as much a mystery as ever.

The precocity of vegetation caused some embarrassment. The time for the corn and fruit harvest had fallen simultaneously with that of the hay-making ; and as the extreme heat precluded any prolonged exertions, it was evident " the population " of the island would find it difficult to provide the necessary amount of labour. Not that the prospect gave them much concern : the provisions of the gourbi were still far from exhausted, and now that the roughness of the weather had so happily subsided, they had every encouragement to hope that a ship of some sort would soon appear. Not only was that part of the Mediterranean systematically frequented by the government steamers that watched the coast, but vessels of all nations were constantly cruising off the shore.

In spite, however, of all their sanguine speculations, no

ship appeared. Ben Zoof admitted the necessity of extemporising a kind of parasol for himself, otherwise he must literally have been roasted to death upon the exposed summit of the cliff.

Meanwhile, Servadac was doing his utmost—it must be acknowledged, with indifferent success—to recall the lessons of his school-days. He would plunge into the wildest speculations in his endeavours to unravel the difficulties of the new situation, and struggled into a kind of conviction that if there had been a change of manner in the earth's rotation on her axis, there would be a corresponding change in her revolution round the sun, which would involve the consequence of the length of the year being either diminished or increased.

Independently of the increased and increasing heat there was another very conclusive demonstration that the earth had thus suddenly approximated towards the sun. The diameter of the solar disc was now exactly twice what it ordinarily looks to the naked eye ; in fact, it was precisely such as it would appear to an observer on the surface of the planet Venus. The most obvious inference would therefore be that the earth's distance from the sun had been diminished from 91,000,000 to 66,000,000 miles. If the just equilibrium of the earth had thus been destroyed, and should this diminution of distance still continue, would there not be reason to fear that the terrestrial world would be carried onwards to actual contact with the sun, which must result in its total annihilation ?

The continuance of the splendid weather afforded Servadac every facility for observing the heavens. Night after night, constellations in their beauty lay stretched before his eyes—an alphabet which, to his mortification, not to say his rage, he was unable to decipher. In the apparent dimensions of the fixed stars, in their distance, in their relative position with regard to each other, he could observe no change. Although it is established that our sun is approaching the constellation of Hercules at the rate of

more than 126,000,000 miles a year, and although Arcturus is travelling through space at the rate of fifty-four miles a second—three times faster than the earth goes round the sun—yet such is the remoteness of those stars that no appreciable change is evident to the senses. The fixed stars taught him nothing.

Far otherwise was it with the planets. The orbits of Venus and Mercury are within the orbit of the earth, Venus rotating at an average distance of 66,130,000 miles from the sun, and Mercury at that of 35,393,000. After pondering long, and as profoundly as he could, upon these figures, Captain Servadac came to the conclusion that, as the earth was now receiving about double the amount of light and heat that it had been receiving before the catastrophe, it was receiving about the same as the planet Venus ; he was driven, therefore, to the estimate of the measure in which the earth must have approximated to the sun, a deduction in which he was confirmed when the opportunity came for him to observe Venus herself in the splendid proportions that she now assumed.

That magnificent planet which—as Phosphorus or Lucifer, Hesperus or Vesper, the evening star, the morning star, or the shepherd's star—has never failed to attract the rapturous admiration of the most indifferent observers, here revealed herself with unprecedented glory, exhibiting all the phases of a lustrous moon in miniature. Various indentations in the outline of its crescent showed that the solar beams were refracted into regions of its surface where the sun had already set, and proved, beyond a doubt, that the planet had an atmosphere of her own ; and certain luminous points projecting from the crescent as plainly marked the existence of mountains—mountains to which Schroeter has assigned an altitude ten times greater than that of Mont Blanc, being $\frac{1}{11}$ th part of the radius of the planet.¹

¹ The highest mountains on the earth do not exceed $\frac{1}{10}$ th part of the earth's radius.

As the result of Servadac's computations, he formed the opinion that Venus could hardly be at a greater distance than 6,000,000 miles from the earth.

"And a very safe distance, too," said Ben Zoof, when his master told him the conclusion at which he had arrived.

"All very well for two armies, but for a couple of planets not quite so safe, perhaps, as you may imagine. It is my impression that it is more than likely we may run foul of Venus," said the Captain.

"Plenty of air and water there, sir?" inquired the orderly.

"Yes; as far as I can tell, plenty," replied Servadac.

"Then why shouldn't we go and visit Venus?"

Servadac did his best to explain that as the two planets were of about equal volume, and were travelling with great velocity in opposite directions, any collision between them must be attended with the most disastrous consequences to one or both of them. But Ben Zoof failed to see that, even at the worst, the catastrophe could be much more serious than the collision of two railway trains.

The Captain became fairly exasperated.

"You idiot!" he angrily exclaimed; "cannot you understand that the planets are travelling a thousand times faster than the fastest express, and that if they meet, either one or the other must be destroyed? What would become of your darling Montmartre then?"

The Captain had touched a tender chord. For a moment Ben Zoof stood with clenched teeth and contracted muscles; then, in a voice of real concern, he inquired whether anything could be done to avert the calamity.

"Nothing whatever; so you may go about your own business," was the Captain's brusque rejoinder.

All discomfited and bewildered, Ben Zoof retired without a word.

During the ensuing days the distance between the two planets continued to decrease, and it became more and

more obvious that the earth, on her new orbit, was about to cross the orbit of Venus.

Throughout this time the earth had been making a perceptible approach towards Mercury, and that planet—which is rarely visible to the naked eye, and then only at what are termed the periods of its greatest eastern and western elongations—now appeared in all its splendour. It amply justified the epithet of “sparkling” which the ancients were accustomed to confer upon it, and could scarcely fail to awaken a new interest. The periodic recurrence of its phases ; its reflection of the sun’s rays, shedding upon it a light and a heat seven times greater than that received by the earth ; its glacial and its torrid zones, which, on account of the great inclination of the axis, are scarcely separable ; its equatorial bands ; its mountains eleven miles high ; were all subjects of observation worthy of the most studious regard.

But no danger was to be apprehended from Mercury ; with Venus only did collision appear imminent. By the 18th of January the distance between that planet and the earth had become reduced to between two and three millions of miles, and the intensity of its light had cast heavy shadows from all terrestrial objects. It might be observed to turn upon its own axis in twenty-three hours twenty-one minutes—an evidence, from the unaltered duration of its days, that the planet had not shared in the disturbance. On its disc the clouds formed from its atmospheric vapour were plainly perceptible, as also were the seven spots which, according to Bianchini, are a chain of seas. It was now visible in broad daylight. Buonaparte, when under the Directory, once had his attention called to Venus at noon, and immediately hailed it joyfully, recognising it as his own peculiar star in the ascendant. Captain Servadac, it may well be imagined, did not experience the same gratifying emotion.

On the 20th, the distance between the two bodies had again sensibly diminished. The Captain had ceased to be

surprised that no vessel had been sent to rescue himself and his companion from their strange imprisonment ; the governor-general and the minister of war were doubtless far differently occupied, and their interests far otherwise engrossed. What sensational articles, he thought, must now be teeming to the newspapers ! What crowds must be flocking to the churches ! The end of the world approaching ! the great climax close at hand ! Two days more, and the earth, shivered into a myriad atoms, would be lost in boundless space !

These dire forebodings, however, were not destined to be realised. Gradually the distance between the two planets began to increase ; the planes of their orbits did not coincide, and accordingly the dreaded catastrophe did not ensue. By the 25th, Venus was sufficiently remote to preclude any further fear of collision. Ben Zoof gave a sigh of relief when the Captain communicated the glad intelligence.

Their proximity to Venus had been close enough to demonstrate that beyond a doubt that planet has no moon or satellite such as Cassini, Short, Montaigne of Limoges, Montbarron, and some other astronomers have imagined to exist.

" Had there been such a satellite," said Servadac, " we might have captured it in passing. But what can be the meaning," he added seriously, " of all this displacement of the heavenly bodies ? "

" What is that great building at Paris, Captain, with a top like a cap ? " asked Ben Zoof.

" Do you mean the Observatory ? "

" Yes, the Observatory. Are there not people living in the Observatory who could explain all this ? "

" Very likely ; but what of that ? "

" Let us be philosophers, and wait patiently until we can hear their explanation."

Servadac smiled.

" Do you know what it is to be a philosopher, Ben Zoof ? " he asked.

"I am a soldier, sir," was the servant's prompt rejoinder, "and I have learnt to know that 'what can't be cured must be endured.'"

The Captain made no reply, but for a time, at least, he desisted from puzzling himself over matters which he felt he was utterly incompetent to explain. But an event soon afterwards occurred which awakened his keenest interest as likely to influence his future proceedings.

About nine o'clock on the morning of the 27th, Ben Zoof walked deliberately into his master's apartment, and in reply to a question as to what he wanted, announced with the utmost composure that a ship was in sight.

"A ship!" exclaimed Servadac, starting to his feet. "A ship! Ben Zoof, you donkey! you speak as unconcernedly as though you were telling me that my dinner was ready."

"Are we not philosophers, Captain?" said the orderly. But the Captain was out of hearing.

CHAPTER IX

INQUIRIES UNSATISFIED

Fast as his legs could carry him, Servadac had made his way to the top of the cliff. It was quite true that a vessel was in sight, hardly more than six miles from the shore; but owing to the increase in the earth's convexity, and the consequent limitation of the range of vision, the rigging of the topmasts alone was visible above the water. This was enough, however, to indicate that the ship was a schooner—an impression that was confirmed when, two hours later, she came entirely in sight.

"The *Dobryna*!" exclaimed Servadac, keeping his eye unmoved at his telescope.

"Impossible, sir!" rejoined Ben Zoof; "there are no signs of smoke."

"The *Dobryna*!" repeated the Captain, positively.

"She is under sail ; but that schooner is Count Timascheff's yacht."

He was right. If the Count were on board, a strange fatality was bringing him to the presence of his rival. But no longer now could Servadac regard him in the light of an adversary ; circumstances had changed, and all animosity was absorbed in the eagerness with which he hailed the prospect of obtaining some information about the recent startling and inexplicable events. During the twenty-seven days that she had been absent, the *Dobryna*, he conjectured, would have explored the Mediterranean, would very probably have visited Spain, France, or Italy, and accordingly would convey to Gourbi Island some intelligence from one or other of those countries. He reckoned, therefore, not only upon ascertaining the extent of the late catastrophe, but upon learning its cause. Count Timascheff was, no doubt, magnanimously coming to the rescue of himself and his orderly.

The wind being adverse, the *Dobryna* did not make very rapid progress ; but as the weather, in spite of a few clouds, remained calm, and the sea was quite smooth, she was enabled to hold a steady course. It seemed unaccountable that she should not use her engine, as whoever was on board would be naturally impatient to reconnoitre the new island, which must just have come within their view. The probability that suggested itself was that the schooner's fuel was exhausted.

Servadac took it for granted that the *Dobryna* was endeavouring to put in. It occurred to him, however, that the Count, on discovering an island where he had expected to find the mainland of Africa, would not unlikely be at a loss for a place of anchorage. The yacht was evidently making her way in the direction of the former mouth of the Shelif, and the Captain was struck with the idea that he would do well to investigate whether there was any suitable mooring towards which he might signal her. Zephyr and Galette were soon saddled, and in twenty

minutes had carried their riders to the westerly extremity of the island, where they both dismounted and began to explore the coast.

They were not long in ascertaining that on the farther side of the point there was a small well-sheltered creek of sufficient depth to accommodate a vessel of moderate tonnage. A narrow channel formed a passage through the ridge of rocks that protected it from the open sea, and which, even in the roughest weather, would ensure the calmness of its waters.

Whilst examining the rocky shore, the Captain observed, to his great surprise, long and well-defined rows of seaweed, which undoubtedly betokened that there had been a very considerable ebb and flow of the waters—a thing unknown in the Mediterranean, where there is scarcely any perceptible tide. What, however, seemed most remarkable, was the manifest evidence that ever since the highest flood (which was caused, in all probability, by the proximity of the body of which the huge disc had been so conspicuous on the night of the 31st of December) the phenomenon had been gradually lessening, and in fact was now reduced to the normal limits which had characterised it before the convulsion.

Without doing more than note the circumstance, Servadac turned his entire attention to the *Dobryna*, which, now little more than a mile from shore, could not fail to see and understand his signals. Slightly changing her course, she first struck her mainsail, and, in order to facilitate the movements of her helmsman, soon carried nothing but her two topsails, brigantine and jib. After rounding the peak, she steered direct for the channel to which Servadac by his gestures was pointing her, and was not long in entering the creek. As soon as the anchor, imbedded in the sandy bottom, had made good its hold, a boat was lowered. In a few minutes more Count Timascheff had landed on the island. Captain Servadac hastened towards him.

"First of all, Count," he exclaimed impetuously, "before we speak one other word, tell me what has happened."

The Count, whose imperturbable composure presented a singular contrast to the French officer's enthusiastic vivacity, made a stiff bow, and in his Russian accent replied :

"First of all, permit me to express my surprise at seeing you here. I left you on a continent, and here I have the honour of finding you on an island."

"I assure you, Count, I have never left the place."

"I am quite aware of it, Captain Servadac, and I now beg to offer you my sincere apologies for failing to keep my appointment with you."

"Never mind, now," interposed the Captain, hastily ; "we will talk of that by-and-by. First, tell me what has happened."

"The very question I was about to put to you, Captain Servadac."

"Do you mean, then, to say that you know nothing of the cause, and can tell me nothing of the extent, of the catastrophe which has transformed this part of Africa into an island ?"

"Nothing more than you know yourself," was the Count's rejoinder.

"But surely, Count Timascheff, you can inform me whether upon the northern shore of the Mediterranean——"

"Are you certain that this is the Mediterranean ?" asked the Count significantly, and added, "I have discovered no sign of land."

The Captain stared in silent bewilderment. For some moments he seemed perfectly stupefied ; then, recovering himself, he began to overwhelm the Count with a torrent of questions. Had he noticed, ever since the 1st of January, that the sun had risen in the west ? Had he noticed that the days had been only six hours long, and that the weight

of the atmosphere was so much diminished? Had he observed that the moon had quite disappeared, and that the earth had been in imminent hazard of running foul of the planet Venus? Was he aware, in short, that the entire motions of the terrestrial sphere had undergone a complete modification? To all these inquiries, the Count responded in the affirmative. He was acquainted with everything that had transpired; but, to Servadac's increasing astonishment, he could throw no light upon the cause of any of the phenomena.

"On the night of the 31st of December," he said, "I was proceeding by sea to our appointed place of meeting, when my yacht was suddenly caught on the crest of an enormous wave, and carried to a height which it is beyond my power to estimate. Some mysterious force seemed to have brought about a convulsion of the elements. Our engine was damaged, nay disabled, and we drifted entirely at the mercy of the terrible hurricane that raged during the succeeding days. That the *Dobryna* escaped at all is little less than a miracle, and I can only attribute her safety to the fact that she occupied the centre of the vast cyclone, and consequently did not experience much change of position."

He paused, and added:

"Your island is the first land we have seen."

"Then let us put out to sea at once and ascertain the extent of the disaster," cried the Captain, eagerly. "You will take me on board, Count, will you not?"

"My yacht is at your service, sir, even should you require to make a tour round the world."

"A tour round the Mediterranean will suffice for the present, I think," said the Captain, smiling.

The Count shook his head.

"I am not sure," said he, "but what the tour of the Mediterranean will prove to be the tour of the world."

Servadac made no reply, but for a time remained silent and absorbed in thought.

After the silence was broken, they consulted as to what course was best to pursue ; and the plan they proposed was, in the first place, to discover how much of the African coast still remained, and to carry on the tidings of their own experiences to Algiers ; or, in the event of the southern shore having actually disappeared, they would make their way northwards and put themselves in communication with the population on the river-banks of Europe.

Before starting, it was indispensable that the engine of the *Dobryna* should be repaired : to sail under canvas only would in contrary winds and rough seas be both tedious and difficult. The stock of coal on board was adequate for two months' consumption ; but as it would at the expiration of that time be exhausted, it was obviously the part of prudence to employ it in reaching a port where fuel could be replenished.

The damage sustained by the engine proved to be not very serious. Some of the boiler-tubes had cracked, allowing the water in consequence to run into the furnace ; but as several spare tubes had been stored in the yacht, these were available to replace the old ones, and in three days after her arrival the *Dobryna* was again ready to put to sea.

Servadac employed the interval in making the Count acquainted with all he knew about his small domain. They made an entire circuit of the island, and both agreed that it must be beyond the limits of that circumscribed territory that they must seek an explanation of what had so strangely transpired.

It was on the last day of January that the repairs of the schooner were completed. A slight diminution in the excessively high temperature which had prevailed for the last few weeks, was the only apparent change in the general order of things ; but whether this was to be attributed to any alteration in the earth's orbit was a question which would still require several days to decide. The weather remained fine, and although a few clouds had accumulated, and might have caused a trifling fall of the barometer,

they were not sufficiently threatening to delay the departure of the *Dobryna*.

Doubts now arose, and some discussion followed, whether or not it was desirable for Ben Zoof to accompany his master. There were various reasons why he should be left behind, not the least important being that the schooner had no accommodation for horses, and the orderly would have found it hard to part with Zephyr, and much more with his own favourite Galette ; besides, it was advisable that there should be some one left to receive any strangers that might possibly arrive, as well as to keep an eye upon the herds of cattle which, in the dubious prospect before them, might prove to be the sole resource of the survivors of the catastrophe. Altogether, taking into consideration that the brave fellow would incur no personal risk by remaining upon the island, the Captain was induced with much reluctance to forgo the attendance of his servant, hoping very shortly to return and to restore him to his country, when he had ascertained the reason of the mysteries in which they were enveloped.

On the 31st, then, Ben Zoof was "invested with Governor's powers," and took an affecting leave of his master, begging him, if chance should carry him near Montmartre, to ascertain whether the beloved "mountain" had been left unmoved.

Farewell over, the *Dobryna* was carefully steered through the creek, and was soon upon the open sea.

CHAPTER X

A SEARCH FOR ALGERIA

THE *Dobryna*, a strong craft of 200 tons burden, had been built in the famous ship-building yards in the Isle of Wight. Her sea-going qualities were excellent, and would have amply sufficed for a circumnavigation of the globe ; in fact, the ships in which Columbus and Magellan took

their voyages across the Atlantic were far inferior both in size and in construction. Her store-compartments were capacious, and carried provisions enough for several months, so that she was quite capable of making the entire circuit of the Mediterranean without any necessity for re-victualing. Neither was there any occasion for her to take in fresh ballast at Gourbi Island. The weight of the water had diminished in precisely the same ratio as that of all material objects, consequently the conditions of the schooner's gravity remained undisturbed.

Count Timascheff was himself no sailor, but had the greatest confidence in leaving the command of his yacht in the hands of Lieutenant Procope, a man of about thirty years of age, and an excellent seaman.

Born on the Count's estate, the son of a serf who had been emancipated long before the famous edict of the Emperor Alexander, Procope was sincerely attached, by a tie of gratitude as well as of duty and affection, to his patron's service. After an apprenticeship on a merchant ship he had entered the imperial navy, and had already reached the rank of lieutenant when the Count appointed him to the charge of his own private yacht, in which he was accustomed to spend by far the greater part of his time, throughout the winter generally cruising in the Mediterranean, whilst in the summer he visited more northern waters.

The ship could not have been in better hands. The Lieutenant was well informed in many matters outside the pale of his profession, and his attainments were alike creditable to himself and to the liberal friend who had given him his education. He had an excellent crew, consisting of Tiglew the engineer, four sailors named Niegoch, Tolstoy, Etkef, and Panofka, and Mochel the cook. These men, without exception, were all sons of the Count's tenants, and so tenaciously, even out at sea, did they cling to their old traditions, that it mattered little to them what physical disorganisation ensued, so long as they felt they

were sharing the experiences of their lord and master. The late astounding events, however, had rendered Procope manifestly uneasy, and not the less so from his consciousness that the Count secretly partook of his own anxiety.

Steam up and canvas spread, the schooner started eastwards. With a favourable wind she would certainly have made eleven knots an hour had not the high waves somewhat impeded her progress. Although only a moderate breeze was blowing, the sea was rough, a circumstance to be accounted for only by the diminution in the force of the earth's attraction rendering the liquid particles so buoyant, that by the mere effect of oscillation they were carried to a height that was quite unprecedented. M. Arago has fixed twenty-five or twenty-six feet as the maximum elevation ever attained by the highest waves, and his astonishment would have been very great to see them rising fifty or even sixty feet. Nor did these waves in the usual way partially unfurl themselves and rebound against the sides of the vessel ; they might rather be described as long undulations carrying the schooner (its weight diminished from the same cause as that of the water) alternately to such heights and depths, that if Captain Servadac had been subject to sea-sickness he must have found himself in sorry plight. As the pitching, however, was the result of a long uniform swell, the yacht did not labour much harder than she would against the ordinary short strong waves of the Mediterranean ; the main inconvenience that was experienced was the diminution in her proper rate of speed.

For a few miles she followed the line hitherto presumably occupied by the coast of Algeria ; but no land appeared to the south. The changed positions of the planets rendered them of no avail for purposes of nautical observation, nor could Lieutenant Procope calculate his latitude and longitude by the altitude of the sun, as his reckonings would be useless when applied to charts that had been constructed for the old order of things ; but nevertheless, by means of the log, which gave him the rate of progress, and by the

compass, which indicated the direction in which they were sailing, he was able to form an estimate of his position that was sufficiently free from error for his immediate need.

Happily the recent phenomena had no effect upon the compass ; the magnetic needle, which in these regions had pointed about 22° from the north pole, had never deviated in the least—a proof that, although east and west had apparently changed places, north and south continued to retain their normal position as cardinal points. The log and the compass, therefore, were able to be called upon to do the work of the sextant, which had become utterly useless.

On the first morning of the cruise Lieutenant Procope, who, like most Russians, spoke French fluently, was explaining these peculiarities to Captain Servadac ; the Count was present, and the conversation perpetually recurred, as naturally it would, to the phenomena which remained so inexplicable to them all.

“ It is very evident,” said the Lieutenant, “ that ever since the 1st of January the earth has been moving in a new orbit, and from some unknown cause has drawn nearer to the sun.”

“ No doubt about that,” said Servadac ; “ and I suppose that, having crossed the orbit of Venus, we have a good chance of running into the orbit of Mercury.”

“ And finish up by a collision with the sun ! ” added the Count.

“ Terrible destruction ! ” exclaimed Servadac, with a shudder.

“ There is no fear of that, Captain Servadac. The earth has undoubtedly entered upon a new orbit, but she is not incurring any probable risk of being precipitated on to the sun.”

“ Can you satisfy us of that ? ” asked the Count.

“ I can, sir. I can give you a proof which I think you will own is conclusive. If, as you suppose, the earth is being drawn on so as to be precipitated against the sun, the great centre of attraction of our system, it could only

be because the centrifugal and centripetal forces that cause the planets to rotate in their several orbits had been entirely suspended : in that case, indeed, the earth would rush onwards towards the sun, and in sixty-four days and a half the catastrophe you dread would inevitably happen."

"And what demonstration do you offer," asked Servadac eagerly, "that it will not happen?"

"Simply this, Captain : that since the earth entered her new orbit half the sixty-four days has already elapsed, and yet it is only just recently that she has crossed the orbit of Venus, hardly one-third of the distance to be traversed to reach the sun."

The Lieutenant paused to allow time for reflection, and added : "Moreover, I have every reason to believe that we are not so near the sun as we have been. The temperature has been gradually diminishing ; the heat upon Gourbi Island is not greater now than we might ordinarily expect to find in Algeria in lat. 36° . At the same time, we have the problem still unsolved that the Mediterranean has evidently been transported to the equatorial zone."

Both the Count and the Captain expressed themselves reassured by his representations, and observed that they must now do all in their power to discover what had become of the vast continent of Africa, of which they were hitherto failing so completely to find a vestige.

Twenty-four hours after leaving the island, the *Dobryna* had passed over the sites where Tenes, Cherchil, Koleah, and Sidi-Feruch once had been, but of these towns not one appeared within range of the telescope. Ocean reigned supreme.

Lieutenant Procope, however, was absolutely certain that he had not mistaken his direction ; the compass showed that the wind had never shifted from the west, and this, with the rate of speed as estimated by the log, combined to assure him that at this date, the 2nd of February, the schooner was in lat. $36^{\circ} 49'$ N. and long. $3^{\circ} 25'$ E., the very spot which ought to have been occupied by the

Algerian capital. But Algiers, like all the other coast-towns, had apparently been absorbed into the bowels of the earth.

Captain Servadac, with clenched teeth and knitted brow, stood sternly, almost fiercely, regarding the boundless waste of water. His pulses beat fast as he recalled the friends and comrades with whom he had spent the last few years in that vanished city. All the images of his past life floated upon his memory; his thoughts sped away to his native France, only to return again to wonder whether the depths of ocean would reveal any traces of the Algerian metropolis.

"Is it not impossible," he murmured aloud, "that any city should disappear so completely? Would not the loftiest eminences of the city at least be visible? Surely some portion of the Casbah must still rise above the waves? The imperial fort, too, was built upon an elevation of 750 feet; it is incredible that it should be so totally submerged. Unless some vestiges of these are found I shall begin to suspect that the whole of Africa has been swallowed in some vast abyss."

Another circumstance was most remarkable. Not a material object of any kind was to be noticed floating on the surface of the water; not one branch of a tree had been seen drifting by, nor one spar belonging to one of the numerous vessels that a month previously had been moored in the magnificent bay which stretched twelve miles across from Cape Matafuz to Point Pexade. Perhaps the depths might disclose what the surface failed to reveal, and Count Timascheff, anxious that Servadac should have every facility afforded him for solving his doubts, called for the sounding-line. Forthwith, the lead was greased and lowered. To the surprise of all, and especially of Lieutenant Procope, the line indicated a bottom at a nearly uniform depth of from four to five fathoms; and although the sounding was persevered with continuously for more than two hours over a considerable area, the differences of level were insignificant, not corresponding

in any degree to what would be expected over the site of a city that had been terraced like the seats of an amphitheatre. Astounding as it seemed, what alternative was left but to suppose that the Algerian capital had been completely levelled by the flood ?

The sea-bottom was composed of neither rock, mud, sand, nor shells ; the sounding-lead brought up nothing but a kind of metallic dust, which glittered with a strange iridescence, and the nature of which it was impossible to determine, as it was totally unlike what had ever been known to be raised from the bed of the Mediterranean.

“ You must see, Lieutenant, I should think, that we are not so near the coast of Algeria as you imagined.”

The Lieutenant shook his head. After pondering awhile, he said :

“ If we were farther away I should expect to find a depth of two or three hundred fathoms instead of five fathoms. Five fathoms ! I confess I am puzzled.”

Hereupon Servadac begged the Count to give instructions for the voyage to be prosecuted towards the south, in order that they might make a more effective search for the coast which so thoroughly eluded their discovery.

After satisfying himself by a short conference with Lieutenant Procope that the weather would permit such a change of course, the Count acceded to the request. Southwards, accordingly, the *Dobryna's* stem was turned.

For the next thirty-six hours, until the 4th of February, the sea was examined and explored with the most unflagging perseverance. Its depth remained invariable, still four, or at most five, fathoms ; and although its bottom was assiduously dredged, it was only to prove it barren of marine production of any type.

The yacht made its way to lat. 36°, and by reference to the charts it was tolerably certain that she was cruising over the site of the Sahel, the ridge that had separated the rich plain of the Mitidja from the sea, and of which the highest peak, Mount Boujereah, had reached an altitude

of 1,200 feet ; but even this peak, which might have been expected to emerge like an islet above the surface of the sea, was nowhere to be traced.

Onwards still steamed the *Dobryna*, beyond the site of Douera, the principal village of the Sahel ; beyond Boufarick, where spreading plane-trees had shaded the spacious streets ; beyond Blidah, of which not even the fort (a thousand feet and more higher than Oued-el-Kebir) survived ; beyond all these, still southwards, until Lieutenant Procope, fearful of venturing farther upon this unknown ocean, entreated that he might be allowed to shift his course to the east, or retrace it to the north ; and it was only upon Servadac's urgent persuasion that he was induced to extend his exploration as far as the mountains of Mouzaïa, the legendary grottoes formerly frequented by the Kabyles, the haunt of lions, hyenas, and jackals, and where gigantic oaks and marvellous bread-fruit trees had flourished in abundance. Surely, it was urged, those lofty summits, which within six weeks had been seen soaring to an altitude of nearly 5,000 feet, would be still conspicuous above the waves. But no ; sea and sky were all that the keenest vision could compass, and nothing was to be done but to put about, and return in disappointment towards the north.

Thus the *Dobryna* regained the waters of the Mediterranean without discovering a trace of the missing province of Algeria.

CHAPTER XI

AN ISLAND TOMB

NO longer, then, could there be any doubt as to the annihilation of a considerable portion of the colony. Not merely had there been a submersion of the land, but the impression was more and more confirmed that the very bowels of the earth must have yawned and closed again

upon a large territory. Of the rocky substratum of the province it became more evident than ever that not a trace remained, and a new soil of unknown formation had certainly taken the place of the old sandy sea-bottom. As it altogether transcended the powers of those on board to elucidate the origin of this catastrophe, it was felt to be incumbent on them at least to ascertain its extent.

After a long and somewhat wavering discussion, it was at length decided that the schooner should take advantage of the favourable wind and weather, and proceed at first towards the east, thus following the outline of what had formerly represented the coast of Africa, until that coast had been lost in boundless sea.

Not a vestige of it all remained ; from Cape Matafuz to Tunis it had all gone, as though it had never been. The maritime town of Dellis, built like Algiers, amphitheatrewise, had totally disappeared ; the highest points were quite invisible ; not a trace on the horizon was left of the Jurjura chain, the topmost point of which was known to have an altitude of more than 7,000 feet ; and the town of Bougiah, the steep declivities of Gouraya, Mount Adrar, Didyela ; the mountains of Little Kabylia, the Triton of the ancients, that group of seven headlands, the highest of which had been 3,500 feet above the sea ; Collo, the ancient port of Constantine ; Stora, the modern port of Philippeville, and Bona with its gulf twenty-four miles wide—all had entirely vanished. A similar fate had befallen Cape de Garde, Cape Rosa, the mountain ridges of Edough, the sandy flats of the coast, Mafrag, and La Calle, once so famous for its coral fisheries ; but now, although the sounding-line was lowered for well-nigh the hundredth time, it failed to raise a single specimen of those beautiful zoophytes with which the Mediterranean is known to abound.

Count Timascheff resolved to hold on his course through the latitudes lately occupied by the coast of Tunis, and to make his way to Cape Blanc, the most northerly point

of Africa, where the channel of the sea between the continent and the coast of Sicily, being comparatively narrow, might present some characteristics which perchance would help to solve their dire perplexity. The *Dobryna*, therefore, having followed the direction of the thirty-seventh parallel of north latitude, on the 7th of February crossed the eleventh degree of east longitude.

The reason that induced the Count and his two colleagues to persevere in their investigations towards the east was that quite recently a long-abandoned project had been revived, and by French influence the new Sahara Sea had been created. This great achievement, which had refilled the Lake Tritonis, that had borne the vessel of the Argonauts, had not only secured to France the monopoly of the traffic between Europe and the Soudan, but had materially improved the climate of the country. From the gulf of Cabes, in lat. 34° N., a wide channel had been opened for the purpose of giving the waters of the Mediterranean access to the vast depression which comprehended the Shotts of Kebir and of Gharsa ; the isthmus existing between an indentation of the Tritonis basin and the sea having been cut asunder, so that the water had once again taken possession of the ancient bed, whence, in default of a continuous supply, it had long ago evaporated under the influence of the Libyan sun.

What had now to be ascertained was whether the restoration of this ancient sea had in any way contributed towards bringing about the new order of things. Was it not possible that the cutting of this new channel had caused an irruption of water of which the annihilation of a considerable portion of Africa was the result ? Was it not more than likely that beyond lat. 34° the *Dobryna* might sight the coast of Tripoli, which would surely prove itself an irresistible obstacle to any wider spread of the disaster ? If, however, on reaching this point they should find that the sea still stretched away indefinitely to the south, it was Lieutenant Procope's opinion that they would

have no alternative but to proceed northwards, and to seek from the shores of Europe a solution of the mystery which seemed to become more and more inexplicable.

Unsparring of her fuel, the *Dobryna* made her way at full steam towards Cape Blanc. Neither Cape Negro nor Cape Serrat was to be seen. The town of Bizerta, once charming in its oriental beauty, had vanished utterly ; its marabouts, or temple-tombs, shaded by magnificent palms that fringed the gulf, which by reason of its narrow mouth had the semblance of a lake, all had disappeared, giving place to a vast waste of sea, the transparent waves of which, as still demonstrated by the sounding-line, had ever the same uniform and arid bottom.

In the course of the day the schooner rounded the point where, five weeks previously, Cape Blanc had been so conspicuous an object, and she was now stemming the waters of what once had been the Bay of Tunis. But bay there was none, and the town from which it had derived its name, with the Arsenal, the Goletta, and the two peaks of Bou-Kournein, had all vanished from the view. Cape Bon, too, the most northern promontory of Africa and the point of the continent nearest to the island of Sicily, had been included in the general devastation.

Before the occurrence of the recent prodigy, the bottom of the Mediterranean just at this point had formed a sudden ridge across the Straits of Libya. The sides of the ridge had shelved to so great an extent that, while the depth of water on the summit had been little more than eleven fathoms, that on either hand of the elevation was little short of a hundred fathoms. A formation such as this plainly indicated that at some remote epoch Cape Bon had been connected with Cape Furina, the extremity of Sicily, in the same manner as Ceuta has doubtless been connected with Gibraltar.

Lieutenant Procope was too well acquainted with the Mediterranean to be unaware of this peculiarity, and would not lose the opportunity of ascertaining whether the

submarine ridge still existed, or whether the sea-bottom between Sicily and Africa had undergone any modification.

Both Timascheff and Servadac were much interested in watching the operations. At a sign from the Lieutenant, a sailor who was stationed at the foot of the fore-shrouds dropped the sounding-lead into the water, and in reply to Procope's inquiries, reported—"Five fathoms and a flat bottom."

The next aim was to determine the amount of depression on either side of the ridge, and for this purpose the *Dobryna* was shifted for a distance of half a mile both to the right and left, and the soundings taken at each station. "Five fathoms and a flat bottom" was the unvaried announcement after each operation. Not only, therefore, was it evident that the submerged chain between Cape Bon and Cape Furina no longer existed, but it was equally clear that the convulsion had caused a general levelling of the sea-bottom, and that the soil, degenerated, as it has been said, into a metallic dust of unrecognised composition, bore no trace of the sponges, sea-anemones, star-fish, sea-nettles, hydrophytes, and shells with which the submarine rocks of the Mediterranean had hitherto been prodigally clothed.

The *Dobryna* now put about and resumed her explorations in a southerly direction. It remained, however, as remarkable as ever how completely throughout the voyage the sea continued to be deserted ; all expectations of hailing a vessel bearing news from Europe were entirely falsified, so that more and more each member of the crew began to be conscious of his isolation, and to believe that the schooner, like a second Noah's Ark, carried the sole survivors of a calamity that had overwhelmed the earth.

On the 9th of February the *Dobryna* passed over the site of the city of Dido, the ancient Byrsa—a Carthage, however, which was now more completely destroyed than ever Punic Carthage had been destroyed by Scipio Africanus or Roman Carthage by Hassan the Saracen.

In the evening, as the sun was sinking below the eastern horizon, Captain Servadac was lounging moodily against the taffrail. From the heaven above, where stars kept peeping fitfully from behind the moving clouds, his eye wandered mechanically to the waters below, where the long waves were rising and falling with the evening breeze.

All at once, his attention was arrested by a luminous speck straight ahead on the southern horizon. At first, imagining that he was the victim of some spectral illusion, he observed it with silent attention ; but when, after some minutes, he became convinced that what he saw was actually a distant light, he appealed to one of the sailors, by whom his impression was fully corroborated. The intelligence was immediately imparted to Count Timascheff and the Lieutenant.

"Is it land, do you suppose?" inquired Servadac, eagerly.

"I should be more inclined to think it is a light on board some ship," replied the Count.

"Whatever it is, in another hour we shall know all about it," said Servadac.

"No, Captain," interposed Lieutenant Procope ; "we shall know nothing until to-morrow."

"What ! not bear down upon it at once?" asked the Count in surprise.

"No, sir ; I should much rather lay to and wait till daylight. If we are really near land, I should be afraid to approach it in the dark."

The Count expressed his approval of the Lieutenant's caution, and thereupon all sail was shortened so as to keep the *Dobryna* from making any considerable progress all through the hours of night. Few as those hours were, they seemed to those on board as if their end would never come. Fearful lest the faint glimmer should at any moment cease to be visible, Hector Servadac did not quit his post upon the deck ; but the light continued unchanged. It shone with about the same degree of lustre as a star of the second magnitude, and from the fact of its remaining stationary,

Procope became more and more convinced that it was on land and did not belong to a passing vessel.

At sunrise every telescope was pointed with keenest interest towards the centre of attraction. The light, of course, had ceased to be visible, but in the direction where it had been seen, and at a distance of about ten miles, there was the distinct outline of a solitary island of very small extent ; rather, as the Count observed, it had the appearance of being the projecting summit of a mountain all but submerged. Whatever it was, it was agreed that its true character must be ascertained, not only to gratify their own curiosity, but for the benefit of all future navigators. The schooner accordingly was steered directly towards it, and in less than an hour had cast anchor within a few cables' length of the shore.

The little island proved to be nothing more than an arid rock rising abruptly about forty feet above the water. It had no outlying reefs, a circumstance that seemed to suggest the probability that in the recent convulsion it had sunk gradually, until it had reached its present position of equilibrium.

Without removing his eye from his telescope, Servadac exclaimed :

“ There is a habitation on the place ; I can see an erection of some kind quite distinctly. Who can tell whether we shall not come across a human being ? ”

Lieutenant Procope looked doubtful. The island had all the appearance of being deserted, nor did a cannon-shot fired from the schooner have the effect of bringing any resident to the shore. Nevertheless, it was undeniable that there was a stone building situated on the top of the rock, and that this building had much the character of an Arabian marabout.

The boat was lowered and manned by the four sailors ; Servadac, Timascheff, and Procope were quickly rowed ashore, and lost no time in commencing their ascent of the steep acclivity. Upon reaching the summit, they found their progress arrested by a kind of wall, or rampart of

singular construction, its materials consisting mainly of vases, fragments of columns, carved bas-reliefs, statues, and portions of broken stelæ, all piled promiscuously together without any pretence to artistic arrangement. They made their way into the enclosure, and finding an open door, they passed through and soon came to a second door, also open, which admitted them to the interior of the marabout, consisting of a single chamber, the walls of which were ornamented in the Arabian style by sculptures of indifferent execution. In the centre was a tomb of the very simplest kind, and above the tomb was suspended a large silver lamp with a capacious reservoir of oil, in which floated a long lighted wick, the flame of which was evidently the light that had attracted Servadac's attention on the previous night.

"Must there not have been a custodian of the marabout?" they mutually asked; but if such there had ever been, he must, they concluded, either have fled or have perished on that eventful night. Not a soul was there in charge, and the sole living occupants were a flock of wild cormorants which, startled at the entrance of the intruders, rose on wing, and took a rapid flight towards the south.

An old French prayer-book was lying on the corner of the tomb; the volume was open, and the page exposed to view was that which contained the office for the celebration of the 25th of August. A sudden revelation flashed across Servadac's mind. The solemn isolation of the island tomb, the open breviary, the ritual of the ancient anniversary, all combined to apprise him of the sanctity of the spot upon which he stood.

"The tomb of St. Louis!" he exclaimed, and his companions involuntarily followed his example, and made a reverential obeisance to the venerated monument.

It was, in truth, the very spot on which tradition asserts that the canonised monarch came to die, a spot to which for six centuries and more his countrymen had paid the homage of a pious regard. The lamp that had been kindled

at the memorial shrine of a saint was now in all probability the only beacon that threw a light across the waters of the Mediterranean, and even this ere long must itself expire.

There was nothing more to explore. The three together quitted the marabout, and descended the rock to the shore, whence their boat re-conveyed them to the schooner, which was soon again on her southward voyage ; and it was not long before the tomb of St. Louis, the only spot that had survived the mysterious shock, was lost to view.

CHAPTER XII

AT THE MERCY OF THE WINDS

As the affrighted cormorants had winged their flight towards the south, there sprang up a sanguine hope on board the schooner that land might be discovered in that direction. Thither, accordingly, it was determined to proceed, and in a few hours after quitting the island of the tomb, the *Dobryna* was traversing the shallow waters that now covered the peninsula of Dakhul, which had separated the Bay of Tunis from the Gulf of Hammamet. For two days she continued an undeviating course, and after a futile search for the coast of the Sahel of Tunis, reached the latitude of 34° , where the meridian had crossed the Gulf of Cables ; but not a trace could be discerned of the estuary that six weeks before had been the inlet to the channel that had flooded the new Sahara Sea. Far as the eye could reach it was all ocean, stretching away indefinitely.

However, before that day, the 11th of February, had closed in, there suddenly arose the cry of "Land !" and in the extreme horizon, right ahead, where land had never been before, it was true enough that a shore was distinctly to be seen. What could it be ? It could not be the coast of Tripoli ; for not only would that low-lying shore be quite invisible at such a distance, but it was certain, moreover, that it lay two degrees at least still further south. It

was soon observed that this newly discovered land was of very irregular elevation, that it extended due east and west across the horizon, thus dividing the gulf into two separate sections and completely concealing the island of Jerba, which must lie behind, and that apparently it had partially filled in the Sahara Sea. Its position was duly traced on the *Dobryna's* chart.

"How strange," exclaimed Hector Servadac, "that after sailing all this time over the sea where we expected to find land, we have at last come upon land where we thought to find sea !"

"Strange, indeed," replied Lieutenant Procope ; "and what appears to me almost as remarkable is that we have never once caught sight either of one of the Maltese tartans or one of the Levantine xebecs that traffic so regularly on the Mediterranean."

"Eastwards or westwards," asked the Count—"which shall be our course ? All further progress to the south is checked."

"Westwards, by all means," replied Servadac, quickly. "I am longing to know whether anything of Algeria is left beyond the Shelif ; besides, as we pass Gourbi Island we might take Ben Zoof on board, and then make away for Gibraltar, where we should be sure to learn something, at least, of European news."

With his usual air of stately courtesy, Count Timascheff begged the Captain to consider the yacht at his own disposal, and desired him to give the Lieutenant instructions accordingly.

Lieutenant Procope, however, hesitated, and after revolving matters for a few moments in his mind, pointed out that as the wind was blowing directly from the west, and seemed likely to increase, if they went to the west in the teeth of the weather, the schooner would be reduced to the use of her engine only, and would have much difficulty in making any headway ; on the other hand, by taking an eastward course, not only would they have the

advantage of the wind, but, under steam and canvas, might hope in a few days to be off the coast of Egypt, and from Alexandria or some other port they would have the same opportunity of getting tidings from Europe as they would at Gibraltar.

Intensely anxious as he was to revisit the province of Oran, and eager, too, to satisfy himself of the welfare of his faithful Ben Zoof, Servadac could not but own the reasonableness of the Lieutenant's objections, and yielded to the proposal that the eastward course should be adopted. The wind gave signs only too threatening of the breeze rising to a gale ; but, fortunately, the waves did not culminate in breakers, but rather in a long swell which ran in the same direction as the vessel.

During the last fortnight the high temperature had been gradually diminishing, until it now reached an average of 20° Cent. (or 68° Fahr.), and sometimes descended as low as 15° . That this diminution was to be attributed to the change in the earth's orbit was a question that admitted of little doubt. After approaching so near to the sun as to cross the orbit of Venus, the earth must now have receded so far from the sun that its normal distance of ninety-one millions of miles was greatly increased, and the probability was great that it was approximating to the orbit of Mars, that planet which in its physical constitution most nearly resembles our own. Nor was this supposition suggested merely by the lowering of the temperature ; it was strongly corroborated by the reduction of the apparent diameter of the sun's disc to the precise dimensions which it would assume to an observer actually stationed on the surface of Mars. The necessary inference that seemed to follow from these phenomena was that the earth had been projected into a new orbit, which had the form of a very elongated ellipse.

Very slight, however, in comparison was the regard which these astronomical wonders attracted on board the *Dobryna*. All interest there was too much absorbed in

terrestrial matters, and in ascertaining what changes had taken place in the configuration of the earth itself, to permit much attention to be paid to its erratic movements through space.

The schooner kept bravely on her way, but well out to sea, at a distance of two miles from land. There was good need of this precaution, for so precipitous was the shore that a vessel driven upon it must inevitably have gone to pieces ; it did not offer a single harbour of refuge, but, smooth and perpendicular as the walls of a fortress, it rose to a height of two hundred, and occasionally of three hundred feet. The waves dashed violently against its base. Upon the general substratum rested a massive conglomerate, the crystallisations of which rose like a forest of gigantic pyramids and obelisks.

But what struck the explorers more than anything was the appearance of singular newness that pervaded the whole of the region. It all seemed so recent in its formation that the atmosphere had had no opportunity of producing its wonted effect in softening the hardness of its lines, in rounding the sharpness of its angles, or in modifying the colour of its surface ; its outline was clearly marked against the sky, and its substance, smooth and polished as though fresh from a founder's mould, glittered with the metallic brilliancy that is characteristic of pyrites. It seemed impossible to come to any other conclusion but that the land before them, continent or island, had been upheaved by subterranean forces above the surface of the sea, and that it was mainly composed of the same metallic element as had characterised the dust so frequently uplifted from the bottom.

The extreme nakedness of the entire tract was likewise very extraordinary. Elsewhere, in various quarters of the globe, there may be sterile rocks, but there are none so adamant as to be altogether unfurrowed by the filaments engendered in the moist residuum of the condensed vapour ; elsewhere there may be barren steeps, but none so rigid as

not to afford some hold to vegetation, however low and elementary may be its type ; but here all was bare, and blank, and desolate—not a symptom of vitality was visible.

Such being the condition of the adjacent land, it could hardly be a matter of surprise that all the sea-birds, the albatross, the gull, the sea-mew, sought continual refuge on the schooner ; day and night they perched fearlessly upon the yards, the report of a gun failing to dislodge them, and when food of any sort was thrown upon the deck they would dart down and fight with eager voracity for the prize. Their extreme avidity was recognised as a proof that any land where they could obtain a sustenance must be far remote.

Onwards thus for several days the *Dobryna* followed the contour of the inhospitable coast, of which the features would occasionally change, sometimes for two or three miles assuming the form of a simple aris, sharply defined as though cut by a chisel, when suddenly the prismatic lamellæ soaring in rugged confusion would again recur ; but all along there was the same absence of beach or tract of sand to mark its base, neither were there any of those shoals of rock that are ordinarily found in shallow water. At rare intervals there were some narrow fissures, but not a creek available for a ship to enter to replenish its supply of water ; and the wide roadsteads were unprotected and exposed to well-nigh every point of the compass.

But after sailing two hundred and forty miles, the progress of the *Dobryna* was suddenly arrested. Lieutenant Procope, who had sedulously inserted the outline of the newly revealed shore upon the maps, announced that it had ceased to run east and west, and had taken a turn due north, thus forming a barrier to their continuing their previous direction. It was, of course, impossible to conjecture how far this barrier extended ; it coincided pretty nearly with the fourteenth meridian of east longitude ; and if it reached, as probably it did, beyond Sicily to Italy, it was certain that the vast basin of the Mediterranean, which had washed

the shores alike of Europe, Asia, and Africa, must have been reduced to about half its original area.

It was resolved to proceed upon the same plan as heretofore, following the boundary of the land at a safe distance. Accordingly, the head of the *Dobryna* was pointed north, making straight, as it was presumed, for the south of Europe. A hundred miles, or somewhat over, in that direction, and it was to be anticipated she would come in sight of Malta, if only that ancient island, the heritage in succession of Phœnicians, Carthaginians, Sicilians, Romans, Vandals, Greeks, Arabians, and the knights of Rhodes, should still be undestroyed.

But Malta, too, was gone ; and when, upon the 14th, the sounding-line was dropped upon its site, it was only with the same result so oftentimes obtained before.

"The devastation is not limited to Africa," observed the Count.

"Assuredly not," assented the Lieutenant ; adding, "and I confess I am almost in despair whether we shall ever ascertain its limits. To what quarter of Europe, if Europe still exists, do you propose that I should now direct your course ?"

"To Sicily, Italy, France !" ejaculated Servadac, eagerly ; "anywhere where we can learn the truth of what has befallen us."

"How if we are the sole survivors ?" said the Count gravely.

Hector Servadac was silent ; his own secret presentiment so thoroughly coincided with the doubts expressed by the Count, that he refrained from saying another word.

The coast, without deviation, still tended towards the north, shutting off all communication with the Gulf of Sydra, anciently the Great Syrtes, which had formerly extended as far as Egypt ; and so uninterrupted was its continuity that there remained no longer any access by sea to the shores of Greece or the ports of Turkey, and consequently all approach to the southern confines of Russia by

way of the Archipelago, the Dardanelles, the Sea of Marmora, the Bosphorus, and the Black Sea, was rendered utterly impossible.

No alternative, therefore, remained than to take a westerly course and to attempt to reach the northern shores of the Mediterranean. On the 16th the *Dobryna* essayed to start upon her altered way, but it seemed as if the elements had conspired to obstruct her progress. A furious tempest arose ; the wind beat dead in the direction of the coast, and the danger incurred by a vessel of a tonnage so light was necessarily very great.

Lieutenant Procope was extremely uneasy. He took in all sail, struck his topmasts, and resolved to rely entirely on his engine. But the peril seemed only to increase. Enormous waves caught the schooner and carried her up to their crests, whence again she was plunged deep into the abysses that they left. The screw failed to keep its hold upon the water, but continually revolved with useless speed in the vacant air ; and thus, although the steam was forced on to the extremest limit consistent with safety, the vessel held her way with the utmost difficulty, and recoiled before the hurricane.

Still, not a single resort for refuge did the inaccessible shore present. Again and again the Lieutenant asked himself what would become of him and his comrades, even if they should survive the peril of shipwreck, and gain a footing upon the cliff. What resources could they expect to find upon that scene of desolation ? What hope could they entertain that any portion of the old continent still existed beyond that dreary barrier ?

It was a trying time, but throughout it all the crew behaved with the greatest courage and composure ; confident in the skill of their commander, and in the stability of their ship, they performed their duties with steadiness and unquestioning obedience.

But neither skill, nor courage, nor obedience could avail ; all was in vain. Despite the strain put upon her engine, the

schooner, bare of canvas (for not even the smallest stay-sail could have withstood the violence of the storm), was drifting with terrific speed towards the menacing precipices, which were only a few short miles to leeward. Fully alive to the hopelessness of their situation, the crew were all on deck.

"All over with us, sir!" said Procope to the Count. "I have done everything that man could do; but our case is desperate. Nothing short of a miracle can save us now. Within an hour we must go to pieces upon yonder rocks."

"Let us, then, commend ourselves to the providence of Him to whom nothing is impossible," replied the Count, in a calm, clear voice that could be distinctly heard by all; and as he spoke, he reverently uncovered, an example in which he was followed by all the rest.

The destruction of the vessel seeming thus inevitable, Lieutenant Procope took the best measures he could to insure a few days' supply of food for any who might escape from the wreck and get ashore. He ordered several cases of provisions and kegs of water to be brought on deck, and saw that they were securely lashed to some empty barrels, to make them float after the ship had gone down.

Less and less grew the distance from the shore, but no creek, no inlet, could be discerned in the towering wall of cliff, which seemed about to topple over and involve them in annihilation. Except a change of wind or, as Procope observed, a supernatural rifting of the rock, nothing could bring deliverance now.

But the wind did not veer, and in a few minutes more the schooner was hardly three cables' distance from the fatal land. All were aware that their last moment had arrived. Servadac and the Count grasped each other's hands for a long farewell; and, tossed by the tremendous waves, the schooner was on the very point of being hurled upon the cliff, when a ringing shout was heard:

"Quick, boys, quick! Hoist the jib, and right the tiller!"

Sudden and startling as the unexpected orders were, they were executed as if by magic.

The Lieutenant, who had shouted from the bow, rushed astern and took the helm, and before anyone had time to speculate upon the object of his manœuvres, he shouted again :

“ Look out ! sharp ! watch the sheets ! ”

An involuntary cry broke forth from all on board. But it was no cry of terror. Right ahead was a narrow opening in the solid rock ; it was hardly forty feet wide. Whether it was a passage or no, it mattered little ; it was at least a refuge ; and, driven by wind and wave, the *Dobryna*, under the dexterous guidance of the Lieutenant, dashed in between its perpendicular walls.

Had she not immured herself in a perpetual prison ?

CHAPTER XIII

A ROYAL SALUTE

“ Then I take your bishop, Major,” said Colonel Murphy, as he made a move that he had taken since the previous evening to consider.

“ I was afraid you would,” replied Major Oliphant, looking intently at the chess-board.

Such was the way in which a long silence was broken on the morning of the 17th of February by the old calendar.

Another day elapsed before another move was made. It was a protracted game ; it had, in fact, already lasted some months—the players being so deliberate, and so fearful of taking a step without the most mature consideration, that even now they were only making the twentieth move. Both of them, moreover, were rigid disciples of the renowned Philidor, who pronounces that to play the pawns well is “ the soul of chess ” ; and, accordingly, not one pawn had been sacrificed without a most vigorous defence.

The men who were thus beguiling their leisure were

two officers in the British Army—Colonel Heneage Finch Murphy and Major Sir John Temple Oliphant. Remarkably similar in personal appearance, they were hardly less so in personal character. Both of them were about forty years of age ; both of them were tall and fair, with bushy whiskers and moustaches ; both of them were phlegmatic in temperament, and both much addicted to the wearing of their uniforms. They were proud of their nationality, and exhibited a manifest dislike, verging upon contempt, of everything foreign. Probably they would have felt no surprise if they had been told that Anglo-Saxons were fashioned out of some specific clay, the properties of which surpassed the investigation of chemical analysis. Without any intentional disparagement they might, in a certain way, be compared to two scarecrows which, though perfectly harmless in themselves, inspire some measure of respect, and are excellently adapted to protect the territory intrusted to their guardianship.

English-like, the two officers had made themselves thoroughly at home in the station abroad in which it had been their lot to be quartered. The faculty of colonisation seems to be indigenous to the native character ; once let an Englishman plant his national standard on the surface of the moon, and it would not be long before a colony was established round it.

The officers had a servant, named Kirke, and a company of ten soldiers of the line. This party of thirteen men were apparently the sole survivors of an overwhelming catastrophe, which on the 1st of January had transformed an enormous rock, garrisoned with well-nigh two thousand troops, into an insignificant island far out to sea. But although the transformation had been so marvellous, it cannot be said that either Colonel Murphy or Major Oliphant had made much demonstration of astonishment.

“ This is all very peculiar, Sir John,” observed the Colonel.

“ Yes, Colonel ; very peculiar,” replied the Major.

"England will be sure to send for us," said one officer.

"No doubt she will," answered the other.

Accordingly, they came to the mutual resolution that they would "stick to their post."

To say the truth, it would have been a difficult matter for the gallant officers to do otherwise ; they had but one small boat ; therefore, it was well that they made a virtue of necessity, and resigned themselves to patient expectation of the British ship which, in due time, would bring relief.

They had no fear of starvation. Their island was mined with subterranean stores, and these were furnished with supplies more than ample for thirteen men—nay, for thirteen Englishmen—for the next five years at least. Preserved meat, ale, brandy—all were in abundance ; consequently, as the men expressed it, they were in this respect "all right."

Of course, the physical changes that had taken place had attracted the notice both of officers and men. But the reversed position of east and west, the diminution of the force of gravity, the altered rotation of the earth, and her projection upon a new orbit, were all things that gave them little concern and no uneasiness ; and when the Colonel and the Major had replaced the pieces on the board which had been disturbed by the convulsion, any surprise they might have felt at the chess-men losing some portion of their weight was quite forgotten in the satisfaction of seeing them retain their equilibrium.

One phenomenon, however, did not fail to make its due impression upon the men ; this was the diminution in the length of day and night. Three days after the catastrophe, Corporal Pim, on behalf of himself and his comrades, solicited a formal interview with the officers. The request having been granted, Pim, with the nine soldiers, all punctiliously wearing the regimental tunic of scarlet and trousers of invisible green, presented themselves at the door of the Colonel's room, where he and his brother-officer were continuing their game. Raising his hand

respectfully to his cap, which he wore poised jauntily over his right ear, and scarcely held on by the strap below his under lip, the corporal waited permission to speak.

After a lingering survey of the chess-board, the Colonel slowly lifted his eyes, and said with official dignity :

“ Well, men, what is it ? ”

“ First of all, sir,” replied the corporal, “ we want to speak to you about our pay, and then we wish to have a word with the Major about our rations.”

“ Say on, then,” said Colonel Murphy. “ What is it about your pay ? ”

“ Just this, sir ; as the days are only half as long as they were, we should like to know whether our pay is to be diminished in proportion.”

The Colonel was taken somewhat aback, and did not reply immediately, though by some significant nods towards the Major, he indicated that he thought the question very reasonable. After a few moments’ reflection he replied :

“ It must, I think, be allowed that your pay was calculated from sunrise to sunrise ; there was no specification of what the interval should be. Your pay will continue as before. England can afford it.”

A buzz of approval burst involuntarily from all the men, but military discipline and the respect due to their officers kept them in check from any boisterous demonstration of their satisfaction.

“ And now, corporal, what is your business with me ? ” asked Major Oliphant.

“ We want to know whether, because the days are only six hours long, we are to have but two meals instead of four ? ”

The officers looked at each other, and by their glances mutually agreed that the Corporal was a man of good sound common sense.

“ Eccentricities of nature,” said the Major, “ cannot interfere with military regulations. It is true that there will

be but an interval of an hour and an half between them, but the rule stands good—four meals a day. England is too rich to grudge her soldiers any of her soldiers' due. Yes ; four meals a day."

"Hurrah !" shouted the soldiers, unable this time to keep their delight within the bounds of military decorum ; and, turning to the right-about, they marched away, leaving the officers to renew their attention to the all-absorbing game.

However confident every one upon the island might profess to be that succour would be sent them from their native land—for Britain never abandons any of her sons—it could not be disguised that that succour was somewhat tardy in making its appearance. Many and various were the conjectures to account for the delay. Perhaps England was engrossed with domestic matters, or perhaps she was absorbed in diplomatic difficulties¹ ; or perchance, more likely than all, Northern Europe had received no tidings of the convulsion that had shattered the south. Some good reason there doubtless was ; but it was undeniable that forty-nine complete days had been registered since the memorable 1st of January, and yet no ship, British or otherwise, had ever been sighted, and although the sea that washed the shores of their island was notoriously one of the most frequented on the face of the globe, it had been uniformly desolate, and untraversed by a single sail. Neither officers nor men, however, permitted themselves to express much surprise or discouragement, but continued their habitual routine ; guard relieved guard, and daily drill was practised with the usual precision. The whole party thrived remarkably well upon the liberal provision of the commissariat department, and if the officers failed to show the same tendency to *embonpoint* which was fast

¹ Amongst other suggestions, it was surmised that England, astonished at the success of the Sahara Sea lately formed by Captain Roudaire, and unwilling to be outdone by France, was occupied in a great scheme for the formation of a similar sea in the centre of Australia.

becoming characteristic of the men, it was only because they deemed it due to their rank to curtail any indulgences which might compromise the fit of their uniform.

On the whole, time passed indifferently well. An Englishman rarely suffers from *ennui*, and then only in his own country, when required to conform to what he calls "the humbug of society"; and the two officers, with their similar tastes, ideas, and dispositions, got on together admirably. It is not to be questioned that they were deeply affected by a sense of regret for their lost comrades, and astounded beyond measure at finding themselves the sole survivors of a garrison of 1,895 men, but with true British pluck and self-control, they had done nothing more than draw up a report that 1,882 names were missing from the muster-roll.

The island itself, the sole surviving fragment of an enormous pile of rock that had reared itself some 1,600 feet above the sea, was not, strictly speaking, the only land that was visible; for about twelve miles to the south there was another island, apparently the very counterpart of what was now occupied by the Englishmen. It was only natural that this should awaken some interest even in the most imperturbable minds, and there was no doubt that the two officers, during one of the rare intervals when they were not absorbed in their game, had decided that it would be desirable at least to ascertain whether the island was deserted, or whether it might not be occupied by some others, like themselves, survivors from the general catastrophe. Certain it is that one morning, when the weather was bright and calm, they had embarked alone in the little boat, and been absent for seven or eight hours. Not even to Corporal Pim did they communicate the object of their excursion, nor say one syllable as to its result, and it could only be inferred from their manner that they were quite satisfied with what they had seen; and very shortly afterwards Major Oliphant was observed to draw up a lengthy document, which was no sooner finished than it was

formally signed and sealed with the seal of the 33rd Regiment. It was directed :

TO THE FIRST LORD OF THE ADMIRALTY,
LONDON,

and kept in readiness for transmission by the first ship that should hail in sight. But time elapsed, and here was the 18th of February without an opportunity having been afforded for any communication with the British Government.

At breakfast that morning, the Colonel observed to the Major that he was under the most decided impression that the 18th of February was a royal anniversary ; and he went on to say that, although he had received no definite instructions on the subject, he did not think that the peculiar circumstances under which they found themselves should prevent them from giving the day its due military honours.

The Major quite concurred ; and it was mutually agreed that the occasion must be honoured by a bumper of port, and by a royal salute. Corporal Pim must be sent for. The corporal soon made his appearance, smacking his lips, having, by a ready intuition, found a pretext for a double morning ration of spirits.

"The 18th of February, you know, Pim," said the Colonel ; "and we must have a salute of twenty-one guns."

"Very good," replied Pim, who was a man of few words.

"And take care that your fellows don't get their arms and legs blown off," added the officer.

"Very good, sir," said the corporal ; and he made his salute and withdrew.

Of all the bombs, howitzers, and various species of artillery with which the fortress had been crowded, one solitary piece remained. This was a cumbrous muzzle-loader of 9-inch calibre, and, in default of the smaller ordnance generally employed for the purpose, had to be brought into requisition for the royal salute.

A sufficient number of charges having been provided, the Corporal brought his men to the reduct, whence the gun's mouth projected over a sloping embrasure. The two officers, in cocked hats and full staff uniform, attended to take charge of the proceedings. The gun was manœuvred in strict accordance with the rules of *The Artilleryman's Manual*, and the firing commenced.

Not unmindful of the warning he had received, the corporal was most careful between each discharge to see that every vestige of fire was extinguished, so as to prevent an untimely explosion while the men were reloading ; and accidents, such as so frequently mar public rejoicings, were all happily avoided.

Much to the chagrin of both Colonel Murphy and Major Oliphant, the effect of the salute fell altogether short of their anticipations. The weight of the atmosphere was so reduced that there was comparatively little resistance to the explosive force of the gases liberated at the cannon's mouth, and there was consequently none of the reverberation, like rolling thunder, that ordinarily follows the discharge of heavy artillery.

Twenty times had the gun been fired, and it was on the point of being loaded for the last time, when the Colonel laid his hand upon the arm of the man who had the ramrod.

"Stop !" he said ; "we will have a ball this time. Let us put the range of the piece to the test."

"A good idea !" replied the Major. "Corporal, you hear the orders."

In quick time an artillery-waggon was on the spot, and the men lifted out a full-sized shot, weighing 200 lbs., which, under ordinary circumstances, the cannon would carry about four miles. It was proposed, by means of telescopes, to note the place where the ball first touched the water, and thus to obtain an approximation sufficiently accurate as to the true range.

Having been duly charged with powder and ball, the

gun was raised to an angle of something under 45° , so as to allow proper development to the curve that the projectile would make, and, at a signal from the Major, the light was applied to the priming.

"Heavens!" "By all that's good!" exclaimed both officers in one breath, as, standing open-mouthed, they hardly knew whether they were to believe the evidence of their own senses. "Is it possible?"

The diminution of the force of attraction at the earth's surface was so considerable that the ball had sped beyond the horizon.

"Incredible!" ejaculated the Colonel.

"Incredible!" echoed the Major.

"Six miles at least!" observed the one.

"Ay, more than that!" replied the other.

Awhile, they gazed at the sea and at each other in mute amazement. But in the midst of their perplexity, what sound was that which startled them? Was it mere fancy? Was it the reverberation of the cannon still booming in their ears? Or was it not truly the report of another and a distant gun in answer to their own? Attentively and eagerly they listened. Twice, thrice did the sound repeat itself. It was quite distinct. There could be no mistake.

"I told you so," cried the Colonel, triumphantly. "I knew our country would not forsake us; it is an English ship, no doubt."

In half an hour two masts were visible above the horizon.

"See! Was I not right? Our country was sure to send to our relief. Here is the ship."

"Yes," replied the Major; "sure enough, she has responded to our gun."

"It is to be hoped," muttered the corporal, "that our ball has done her no damage."

Before long the hull was full in sight. A long trail of smoke betokened her to be a steamer; and very soon, by the aid of the glass, it could be ascertained that she was a schooner-yacht, and making straight for the island. A

flag at her masthead fluttered in the breeze, and towards this the two officers, with the keenest attention, respectively adjusted their focus.

Simultaneously the two telescopes were lowered. The Colonel and the Major stared at each other in blank astonishment.

“Russian !” they gasped.

And true it was that the flag that floated at the head of yonder mast was the white ground and blue cross of Russia.

CHAPTER XIV

SENSITIVE NATIONALITY

When the schooner had approached the island, the Englishmen were able to make out the name *Dobryna* painted on the aft-board. A sinuous irregularity of the coast had formed a kind of cove, which, though hardly spacious enough for a few fishing-smacks, would afford the yacht a temporary anchorage, so long as the wind did not blow violently from either the west or south. Into this cove the *Dobryna* was duly signalled, and as soon as she was safely moored, she lowered her four-oar, and Count Timascheff and Captain Servadac made their way at once to land.

Colonel Heneage Finch Murphy and Major Sir John Temple Oliphant stood, grave and prim, formally awaiting the arrival of their visitors. Captain Servadac, with the uncontrolled vivacity natural to a Frenchman, was the first to speak.

“A joyful sight, gentlemen !” he exclaimed. “It will give us unbounded pleasure to shake hands again with some of our fellow-creatures. You, no doubt, have escaped the same disaster as ourselves.”

But the English officers, neither by word nor gesture, made the slightest acknowledgment of this familiar greeting.

“What news can you give us of France, England, or

Russia?" continued Servadac, perfectly unconscious of the stolid rigidity with which his advances were received.

"We are anxious to hear anything you can tell us. Have you had communications with Europe? Have you——"

"To whom have we the honour of speaking?" at last interposed Colonel Murphy, in the coldest and most measured tone, and drawing himself up to his full height.

"Ah! how stupid! I forgot," said Servadac, with the slightest possible shrug of the shoulders; "we have not been introduced."

Then, with a wave of his hand towards his companion, who meanwhile had exhibited a reserve hardly less than that of the British officers, he said:

"Allow me to introduce you to Count Wassili Timascheff."

"Major Sir John Temple Oliphant," replied the Colonel.

The Russian and the Englishman mutually exchanged the stiffest of bows.

"I have the pleasure of introducing Captain Servadac," said the Count in his turn.

"And this is Colonel Heneage Finch Murphy," was the Major's grave rejoinder.

More bows were interchanged and the ceremony brought to its due conclusion. It need hardly be said that the conversation had been carried on in French, a language which is generally known both by Russians and Englishmen—a circumstance that is probably in some measure to be accounted for by the refusal of Frenchmen to learn either Russian or English.

The formal preliminaries of etiquette being thus complete, there was no longer any obstacle to a freer intercourse. The Colonel, signing to his guests to follow, led the way to the apartment occupied jointly by himself and the Major, which, although only a kind of casemate hollowed in the rock, nevertheless wore a general air of comfort.

Major Oliphant accompanied them, and all four having taken their seats, the conversation was commenced.

Irritated and disgusted at all the cold formalities, Hector Servadac resolved to leave all the talking to the Count ; and he, quite aware that the Englishmen would adhere to the fiction that they could be supposed to know nothing that had transpired previous to the introduction, felt himself obliged to recapitulate matters from the very beginning.

"You must be aware, gentlemen," began the Count, "that a most singular catastrophe occurred on the 1st of January last. Its cause, its limits we have utterly failed to discover, but from the appearance of the island on which we find you here, you have evidently experienced its devastating consequences."

The Englishmen, in silence, bowed assent.

"Captain Servadac, who accompanies me," continued the Count, "has been most severely tried by the disaster. Engaged as he was in an important mission as a staff-officer in Algeria——"

"A French colony, I believe," interposed Major Oliphant, half shutting his eyes with an expression of supreme indifference.

Servadac was on the point of making some cutting retort, but Count Timascheff, without allowing the interruption to be noticed, calmly continued his narrative :

"It was near the mouth of the Shelif that a portion of Africa, on that eventful night, was transformed into the island which alone survived ; the rest of the vast continent disappeared as completely as if it had never been."

The announcement seemed by no means startling to the phlegmatic Colonel.

"Indeed !" was all he said.

"And where were you ?" asked Major Oliphant.

"I was out at sea, cruising in my yacht, hard by ; and I look upon it as a miracle, and nothing less, that I and my crew escaped with our lives."

"I congratulate you on your luck," replied the Major. The Count resumed :

"It was about a month after the great disruption that I was sailing—my engine having sustained some damage in the shock—along the Algerian coast, and had the pleasure of meeting with my previous acquaintance, Captain Servadac, who was resident upon the island with his orderly, Ben Zoof."

"Ben who?" inquired the Major.

"Zoof! Ben Zoof!" ejaculated Servadac, who could scarcely shout loud enough to relieve his pent-up feelings.

Ignoring this ebullition of the Captain's spleen, the Count went on to say :

"Captain Servadac was naturally most anxious to get what news he could. Accordingly, he left his servant on the island in charge of his horses, and came on board the *Dobryna* with me. We were quite at a loss to know where we should steer, but decided to direct our course to what previously had been the east, in order that we might, if possible, discover the colony of Algeria; but of Algeria not a trace remained."

The Colonel curled his lip, insinuating only too plainly that to him it was by no means surprising that a French colony should be wanting in the element of stability. Servadac observed the supercilious look, and half rose to his feet, but, smothering his resentment, took his seat again without speaking.

"The devastation, gentlemen," said the Count, who persistently refused to recognise the Frenchman's irritation, "everywhere was terrible and complete. Not only was Algeria lost, but there was no trace of Tunis, except one solitary rock, which was crowned by an ancient tomb of one of the kings of France——"

"Louis the Ninth, I presume," observed the Colonel.

"Saint Louis," blurted out Servadac, savagely.

Colonel Murphy slightly smiled.

Proof against all interruption, Count Timascheff, as if

he had not heard it, went on without pausing. He related how the schooner had pushed her way onwards to the south, and had reached the Gulf of Cables ; and how she had ascertained for certain that the Sahara Sea had no longer an existence.

The smile of disdain again crossed the Colonel's face ; he could not conceal his opinion that such a destiny for the work of a Frenchman could be no matter of surprise.

" Our next discovery," continued the Count, " was that a new coast had been upheaved right along in front of the coast of Tripoli, the geological formation of which was altogether strange, and which extended to the north as far as the proper place of Malta."

" And Malta," cried Servadac, unable to control himself any longer ; " Malta—town, forts, soldiers, governor, and all—has vanished just like Algeria."

For a moment a cloud rested upon the Colonel's brow, only to give place to an expression of decided incredulity.

" The statement seems highly incredible," he said.

" Incredible ? " repeated Servadac. " Why is it that you doubt my word ? "

The Captain's rising wrath did not prevent the Colonel from replying coolly :

" Because Malta belongs to England."

" I can't help that," answered Servadac, sharply ; " it has gone just as utterly as if it had belonged to China."

Colonel Murphy turned deliberately away from Servadac and appealed to the Count :

" Do you not think you may have made some error, Count, in reckoning the bearings of your yacht ? "

" No, Colonel, I am quite certain of my reckonings ; and not only can I testify that Malta has disappeared, but I can affirm that a large section of the Mediterranean has been closed in by a new continent. After the most anxious investigation, we could discover only one narrow opening in all the coast, and it is by following that little channel that we have made our way hither. England, I fear, has

suffered grievously by the late catastrophe. Not only has Malta been entirely lost, but of the Ionian Islands that were under England's protection, there seems to be but little left."

"Ay, you may depend upon it," said Servadac, breaking in upon the conversation petulantly, "your grand resident Lord High Commissioner has not much to congratulate himself about in the condition of Corfu."

The Englishmen were mystified.

"Corfu, did you say?" asked Major Oliphant.

"Yes, Corfu; I said Corfu," replied Servadac, with a sort of malicious triumph.

The officers were speechless with astonishment.

The silence of bewilderment was broken at length by Count Timascheff making inquiry whether nothing had been heard from England, either by telegraph or by any passing ship.

"No," said the Colonel; "not a ship has passed; and the cable is broken."

"But do not the Italian telegraphs assist you?" continued the Count.

"Italian! I do not comprehend you. You must mean the Spanish, surely."

"How?" demanded Timascheff.

"Confound it!" cried the impatient Servadac. "What matters whether it be Spanish or Italian? Tell us, have you had no communication at all from Europe?—no news of any sort from London?"

"Hitherto, none whatever," replied the Colonel; adding with a stately emphasis, "but we shall be sure to have tidings from England before long."

"Whether England is still in existence or not, I suppose," said Servadac, in a tone of irony.

The English officers started simultaneously to their feet.

"England in existence?" the Colonel cried. "England! Ten times more probable that France——"

"France!" shouted Servadac in a passion. "France is

not an island that can be submerged ; France is an integral portion of a solid continent. France, at least, is safe."

A scene appeared inevitable, and Count Timascheff's efforts to conciliate the excited parties were of small avail.

"You are at home here," said Servadac, with as much calmness as he could command ; "it will be advisable, I think, for this discussion to be carried on in the open air."

And hurriedly he left the room.

Followed immediately by the others, he led the way to a level piece of ground, which he considered he might fairly claim as neutral territory.

"Now, gentlemen," he began haughtily, "permit me to represent that, in spite of any loss France may have sustained in the fate of Algeria, France is ready to answer any provocation that affects her honour. Here I am the representative of my country, and here, on neutral ground——"

"Neutral ground ?" objected Colonel Murphy ; "I beg your pardon. This, Captain Servadac, is English territory. Do you not see the English flag ?" and, as he spoke, he pointed with national pride to the British standard floating over the top of the island.

"Pshaw !" cried Servadac, with a contemptuous sneer ; "that flag, you know, has been hoisted but a few short weeks."

"That flag has floated where it is for ages," asserted the Colonel.

"An imposture !" shouted Servadac, as he stamped with rage.

Recovering his composure in a degree, he continued :

"Can you suppose that I am not aware that this island on which we find you is what remains of the Ionian representative republic, over which you English exercise the right of protection, but have no claim of government ?"

The Colonel and the Major looked at each other in amazement.

Although Count Timascheff secretly sympathised with

Servadac, he had carefully refrained from taking part in the dispute ; but he was on the point of interfering, when the Colonel, in a greatly subdued tone, begged to be allowed to speak.

“ I begin to apprehend,” he said, “ that you must be labouring under some strange mistake. There is no room for questioning that the territory here is England’s—England’s by right of conquest ; ceded to England by the Treaty of Utrecht. Three times, indeed—in 1727, 1779, and 1792—France and Spain have disputed our title, but always to no purpose. You are, I assure you, at the present moment, as much on English soil as if you were in London, in the middle of Trafalgar Square.”

It was now the turn of the Captain and the Count to look surprised.

“ Are we not, then, in Corfu ? ” they asked.

“ You are at Gibraltar,” replied the Colonel.

Gibraltar ! The word fell like a thunderclap upon their ears. Gibraltar ! the western extremity of the Mediterranean ! Why, had they not been sailing persistently to the east ? Could they be wrong in imagining that they had reached the Ionian Islands ? What new mystery was this ?

Count Timascheff was about to proceed with a more rigorous investigation, when the attention of all was arrested by a loud outcry. Turning round, they saw that the crew of the *Dobryna* was in hot dispute with the English soldiers. A general altercation had arisen from a disagreement between the sailor Panofka and Corporal Pim. It had transpired that the cannon-ball fired in experiment from the island had not only damaged one of the spars of the schooner, but had broken Panofka’s pipe, and, moreover, had just grazed his nose, which, for a Russian’s, was unusually long. The discussion over this mishap led to mutual recriminations, till the sailors had almost come to blows with the garrison.

Servadac was just in the mood to take Panofka’s part,

which drew from Major Oliphant the remark that England could not be held responsible for any accidental injury done by her cannon, and if the Russian's long nose came in the way of the ball, the Russian must submit to the mischance.

This was too much for Count Timascheff, and having poured out a torrent of angry invective against the English officers, he ordered his crew to embark immediately.

"We shall meet again," said Servadac, as they pushed off from shore.

"Whenever you please," was the cool reply.

The geographical mystery haunted the minds of both the Count and the Captain, and they felt they could never rest till they had ascertained what had become of their respective countries. They were glad to be on board again, that they might resume their voyage of investigation, and in two hours were out of sight of the sole remaining fragment of Gibraltar.

CHAPTER XV

AN ENIGMA FROM THE SEA

Lieutenant Procope had been left on board in charge of the *Dobryna*, and on resuming the voyage it was a task of some difficulty to make him understand the fact that had just come to light. Some hours were spent in discussion and in attempting to penetrate the mysteries of the situation.

There were certain things of which they were perfectly certain. They could be under no misapprehension as to the distance they had positively sailed from Gourbi Island towards the east before their further progress was arrested by the unknown shore ; as nearly as possible that was fifteen degrees : the length of the narrow strait by which they had made their way across that land to regain the open sea was about three miles and a half ; thence onward to the island, which they had been assured, on evidence that they could not disbelieve, to be upon the site of Gibraltar,

was four degrees ; while from Gibraltar to Gourbi Island was seven degrees or but little more. What was it altogether ? Was it not less than thirty degrees ? In that latitude, the degree of longitude represents eight and forty miles. What, then, did it all amount to ? Indubitably, to less than 1,400 miles. So brief a voyage would bring the *Dobryna* once again to her starting-point, or, in other words, would enable her to complete the circumnavigation of the globe. How changed the condition of things ! Previously, to sail from Malta to Gibraltar by an eastward course would have involved the passage of the Suez Canal, the Red Sea, the Indian Ocean, the Pacific, the Atlantic ; but what had happened now ? Why, Gibraltar had been reached as if it had been just at Corfu, and some three hundred and thirty degrees of the earth's circuit had vanished utterly.

After allowing for a certain margin of miscalculation, the main fact remained undeniable ; and the necessary inference that Lieutenant Procope drew from the round of the earth being completed in 1,400 miles, was that the earth's diameter had been reduced by about fifteen sixteenths of its length.

"If that be so," observed the Count, "it accounts for some of the strange phenomena we witness. If our world has become so insignificant a spheroid, not only has its gravity diminished, but its rotatory speed has been accelerated ; and this affords an adequate explanation of our days and nights being thus curtailed. But how about the new orbit in which we are moving ? "

He paused and pondered, and then looked at Procope as though awaiting from him some further elucidation of the difficulty.

The Lieutenant hesitated. When, in a few moments, he began to speak, Servadac smiled intelligently, anticipating the answer he was about to hear.

"My conjecture is," said Procope, "that a fragment of considerable magnitude has been detached from the earth ; that it has carried with it an envelope of the earth's

atmosphere, and that it is now travelling through the solar system in an orbit that does not correspond at all with the proper orbit of the earth."

The hypothesis was plausible ; but what a multitude of bewildering speculations it entailed !

If, in truth, a certain mass had been broken off from the terrestrial sphere, whither would it wend its way ? What would be the measure of the eccentricity of its path ? What would be its period round the sun ? Might it not, like a comet, be carried away into the vast infinity of space ? or, on the other hand, might it not be attracted to the great central source of light and heat, and be absorbed in it ? Did its orbit correspond with the orbit of the ecliptic ? and was there no chance of its ever uniting again with the globe, from which it had been torn off by so sudden and violent a disruption ?

A thoughtful silence fell upon them all, which Servadac was the first to break.

"Lieutenant," he said, "your explanation is ingenious, and accounts for many appearances ; but it seems to me that in one point it fails."

"How so ?" replied Procope. "To my mind the theory meets all objections."

"I think not," Servadac answered. "In one point, at least, it appears to me to break down completely."

"What is that ?" asked the Lieutenant.

"Stop a moment," said the Captain. "Let us see that we understand each other right. Unless I mistake you, your hypothesis is that a fragment of the earth, comprising the Mediterranean and its shores from Gibraltar to Malta, has been developed into a new asteroid, which is started on an independent orbit in the solar regions. Is not that your meaning ?"

"Precisely so," the Lieutenant acquiesced.

"Well, then," continued Servadac, "it seems to me to be at fault in this respect : it fails, and fails completely, to account for the geological character of the land that we

have found now encompassing this sea. Why, if the new land is a fragment of the old—why does it not retain its old formation? What has become of the granite and the calcareous deposits? How is it that these should all be changed into a mineral concrete with which we have no acquaintance?”

No doubt, it was a serious objection; for, however likely it might be that a mass of the earth on being detached would be eccentric in its movements, there was no probable reason to be alleged why the material of its substance should undergo so complete a change. There was nothing to account for the fertile shores, rich in vegetation, being transformed into rocks arid and barren beyond precedent.

The Lieutenant felt the difficulty, and owned himself unprepared to give at once an adequate solution; nevertheless, he declined to renounce his theory. He asserted that the arguments in favour of it carried conviction to his mind, and that he entertained no doubt but that, in the course of time, all apparently antagonistic circumstances would be explained so as to become consistent with the view he took. He was careful, however, to make it understood that with respect to the original cause of the disruption he had no theory to offer; and although he knew that expansion might be the result of subterranean forces, he did not venture to say that he considered it sufficient to produce so tremendous an effect. The origin of the catastrophe was a problem still to be solved.

“Ah, well,” said Servadac, “I don’t know that it matters much where our new little planet comes from, or what it is made of, if only it carries France along with it.”

“And Russia,” added the Count.

“And Russia, of course,” said Servadac, with a polite bow.

There was, however, not much room for this sanguine expectation, for if a new asteroid had thus been brought into existence, it must be a sphere of extremely limited dimensions, and there could be little chance that it

embraced more than the merest fraction of either France or Russia. As to England, the total cessation of all telegraphic communication between her shores and Gibraltar was a virtual proof that England was beyond its compass.

And what was the true measurement of the new little world ? At Gourbi Island the days and nights were of equal length, and this seemed to indicate that it was situated on the equator ; hence the distance by which the two poles stood apart would be half what had been reckoned would be the distance completed by the *Dobryna* in her circuit. That distance had been already estimated to be something under 1,400 miles, so that the Arctic Pole of their recently fashioned world must be about 350 miles to the north, and the Antarctic about 350 miles to the south of the island. Compare these calculations with the map, and it is at once apparent that the northernmost limit barely touched the coast of Provence, while the southernmost reached to about lat. 29° N., and fell in the heart of the desert. The practical test of these conclusions would be made by future investigation, but meanwhile the fact appeared very much to strengthen the presumption that, if Lieutenant Procope had not arrived at the whole truth, he had made a considerable advance towards it.

The weather, ever since the storm that had driven the *Dobryna* into the creek, had been magnificent. The wind continued favourable, and now under both steam and canvas, she made a rapid progress towards the north, a direction in which she was free to go in consequence of the total disappearance of the Spanish coast, from Gibraltar right away to Alicante. Malaga, Almeria, Cape Gata, Carthagena, Cape Palos—all were gone. The sea was rolling over the southern extent of the peninsula, so that the yacht advanced to the latitude of Seville before it sighted any land at all, and then, not shores such as the shores of Andalusia, but a bluff and precipitous cliff, in its geological features resembling exactly the stern and barren rock that she had coasted beyond the site of Malta. Here the sea

made a decided indentation on the coast ; it ran up in an acute-angled triangle till its apex coincided with the very spot upon which Madrid had stood. But as hitherto the sea had encroached upon the land, the land in its turn now encroached upon the sea ; for a frowning headland stood out far into the basin of the Mediterranean, and formed a promontory stretching out beyond the proper places of the Balearic Isles. Curiosity was all alive. There was the intensest interest awakened to determine whether no vestige could be traced of Majorca, Minorca, or any of the group, and it was during a deviation from the direct course for the purpose of a more thorough scrutiny, that one of the sailors raised a thrill of general excitement by shouting, " A bottle in the sea ! "

Here, then, at length was a communication from the outer world. Surely now they would find a document which would throw some light upon all the mysteries that had happened ? Had not the day now dawned that should set their speculations all at rest ?

It was the morning of the 21st of February. The Count, the Captain, the Lieutenant, everybody hurried to the fore-castle ; the schooner was dexterously put about, and all was eager impatience until the supposed bottle was hauled on deck.

It was not, however, a bottle ; it proved to be a round leather telescope-case, about a foot long, and the first thing to do before investigating its contents was to make a careful examination of its exterior. The lid was fastened on by wax, and so securely that it would take a long immersion before any water could penetrate ; there was no maker's name to be deciphered ; but impressed very plainly with a seal on the wax were the two initials " P.R."

When the scrutiny of the outside was finished, the wax was removed and the cover opened, and the Lieutenant drew out a slip of ruled paper, evidently torn from a common note-book. The paper had an inscription written in four lines, which were remarkable for the profusion of

notes of admiration and interrogation with which they were interspersed :—

“ Gallia ? ? ?

Ab sole, au 15 fév. dist. 59,000,000 l. !

Chemin parcouru de janv. à fév. 82,000,000 l. !!

Va bene ! All right ! ! Parfait ! ! !”

There was a general sigh of disappointment. They turned the paper over and over, and handed it from one to another.

“ What does it all mean ? ” exclaimed the Count.

“ Something mysterious here ! ” said Servadac. “ But yet,” he continued, after a pause, “ one thing is tolerably certain : on the 15th, six days ago, some one was alive to write it.”

“ Yes ; I presume there is no reason to doubt the accuracy of the date,” assented the Count.

To this strange conglomeration of French, English, Italian, and Latin, there was no signature attached ; nor was there anything to give a clue as to the locality in which it had been committed to the waves. A telescope-case would probably be the property of someone on board a ship ; and the figures obviously referred to the astronomical wonders that had been experienced.

To these general observations Captain Servadac objected that he thought it unlikely that anyone on board a ship would use a telescope-case for this purpose, but would be sure to use a bottle as being more secure ; and, accordingly, he should rather be inclined to believe that the message had been set afloat by some *savant* left alone, perchance, upon some isolated coast.

“ But, however interesting it might be,” observed the Count, “ to know the author of the lines, to us it is of far greater moment to ascertain their meaning.”

And taking up the paper again, he said :

“ Perhaps we might analyse it word by word, and from its detached parts gather some clue to its sense as a whole.”

"What can be the meaning of all that cluster of interrogations after Gallia?" asked Servadac.

Lieutenant Procope, who had hitherto not spoken, now broke his silence by saying :

"I beg, gentlemen, to submit my opinion that this document goes very far to confirm my hypothesis that a fragment of the earth has been precipitated into space."

Captain Servadac hesitated, and then replied :

"Even if it does, I do not see how it accounts in the least for the geological character of the new asteroid."

"But will you allow me for one minute to take my supposition for granted?" said Procope. "If a new little planet has been formed, as I imagine, by disintegration from the old, I should conjecture that Gallia is the name assigned to it by the writer of this paper. The very notes of interrogation are significant that he was in doubt what he should write."

"You would presume that he was a Frenchman?" asked the Count.

"I should think so," replied the Lieutenant.

"Not much doubt about that," said Servadac ; "it is all in French, except a few scattered words of English, Latin and Italian, inserted plainly to attract attention. He could not tell into whose hands the message would fall first."

"Well, then," said Count Timascheff, "we seem to have found a name for the new world we occupy."

"But what I was going especially to observe," continued the Lieutenant, "is that the distance, 59,000,000 leagues, represents precisely the distance we ourselves were from the sun on the 15th. It was on that day we crossed the orbit of Mars."

"Yes, true," assented the others.

"And the next line," said the Lieutenant, after reading it aloud, "apparently registers the distance traversed by Gallia, the new little planet, in her own orbit. Her speed, of course, we know by Kepler's laws, would vary according

to her distance from the sun, and if she were—as I conjecture from the temperature at that date—on the 15th of January at her perihelion, she would be travelling twice as fast as the earth, which moves at the rate of between 50,000 and 60,000 miles an hour.”

“You think, then,” said Servadac, with a smile, “you have determined the perihelion of our orbit: but how about the aphelion? Can you form a judgment as to what distance we are likely to be carried?”

“You are asking too much,” remonstrated the Count.

“I confess,” said the Lieutenant, “that just at present I am not able to clear away the uncertainty of the future; but I feel confident that by careful observation at various points we shall arrive at conclusions which not only will determine our path, but perhaps may clear up the mystery about our geological structure.”

“Allow me to ask,” said Count Timascheff, “whether such a new asteroid would not be subject to ordinary mechanical laws, and whether, once started, it would not have an orbit that must be immutable?”

“Decidedly it would, so long as it was undisturbed by the attraction of some considerable body; but we must recollect that, compared to the great planets, Gallia must be almost infinitesimally small, and so might be attracted by a force that is irresistible.”

“Altogether, then,” said Servadac, “we seem to have settled it to our entire satisfaction that we must be the population of a young little world called Gallia. Perhaps some day we may have the honour of being registered amongst the minor planets.”

“No chance of that,” quickly rejoined Lieutenant Procope. “Those minor planets all are known to rotate in a narrow zone between the orbits of Mars and Jupiter; in their perihelia they cannot approximate the sun as we have done; we shall not be classed with them.”

“Our lack of instruments,” said the Count, “is much to be deplored; it baffles our investigations in every way.”

"Ah, never mind ! Keep up your courage, Count !" said Servadac, cheerily.

And Lieutenant Procope renewed his assurances that he entertained good hopes that every perplexity would soon be solved.

"I suppose," remarked the Count, "that we cannot attribute much importance to the last line :

' Va bene ! All right ! ! Parfait ! ! ! ' "

The Captain answered :

"At least, it shows that whoever wrote it had no murmuring or complaint to make, but was quite content with the new order of things."

CHAPTER XVI

THE RESIDUUM OF A CONTINENT

Almost unconsciously, the voyagers in the *Dobryna* fell into the habit of using Gallia as the name of the new world in which they became aware they must be making an extraordinary excursion through the realms of space. Nothing, however, was allowed to divert them from their ostensible object of making a survey of the coast of the Mediterranean, and accordingly they persevered in following that singular boundary which had revealed itself to their extreme astonishment.

Having rounded the great promontory that had barred her farther progress to the north, the schooner skirted its upper edge until it brought her to the bearings of the city of Barcelona. But that busy port, with all the adjacent coast, had disappeared, and the surf was beating against a barrier of cliffs that seemed to have been upheaved a little in the rear of the old sea-margin, and which, after a considerable distance, took a sudden turn and rebuffed into the sea close to the proper site of Cape Creus.

Of Cape Creus, however, there was no vestige left.

A few more leagues and they ought to be abreast of the shores of France. Yes, of France.

But who shall describe the feelings of Hector Servadac when, instead of the charming outline of his native land, he beheld nothing but a solid boundary of savage rock? Who shall paint the look of consternation with which he gazed upon the stony rampart—rising perpendicularly for a thousand feet—that had replaced the shores of the smiling south? Who shall reveal the burning anxiety with which he throbbed to see beyond that cruel wall?

But there seemed no hope. Onwards and onwards the yacht made her way, and still no sign of France. Cape Bearn was not there. Neither Port Vendres, nor the pools of St. Nazaire and Salces, nor any other relic of the Pyrénées-Orientales could be traced. The picturesque Narbonne, beautiful with its alternate isles and lakelets, was nowhere to be distinguished. Not a vestige of Cette or of Frantignan could be recognised. The *arrondissement* of Nîmes no longer was seen projecting into the waters of the Mediterranean. The estuary of the Rhone had disappeared. Martignes was gone. Marseilles gone, too. Was it not to be feared that France itself had been annihilated?

It might have been supposed that Servadac's previous experiences would have prepared him for the discovery that the catastrophe which had overwhelmed other sites had brought destruction to his own country as well. But he had failed to realise how it might extend to France; and when now he was obliged with his own eyes to witness the waves of ocean rolling over what once had been the lovely shores of Provence, he was well-nigh frantic with desperation.

"Am I to believe that Gourbi Island, that little shred of Algeria, constitutes all that is left of our glorious France? No, no; it cannot be. Not yet have we reached the pole of our new world. There is—there must be—something more behind that frowning rock. Oh, that for a moment we could scale its towering height and look beyond! By

heaven, I adjure you, let us disembark, and mount the summit and explore ! France lies beyond."

Disembarkation, however, was an utter impossibility. There was no semblance of a creek in which the *Dobryna* could find an anchorage. There was no outlying ridge on which a footing could be gained. The precipice was perpendicular as a wall, its topmast height crowned with the same conglomerate of crystallised lamellæ that had all along been so pronounced a feature.

With her steam at high pressure, the yacht made rapid progress towards the east. The weather remained perfectly fine, the temperature became gradually cooler, so that there was little prospect of vapours accumulating in the atmosphere ; and nothing more than a few cirri, almost transparent, veiled here and there the clear azure of the sky. Throughout the day the pale rays of the sun, apparently lessened in its magnitude, cast only faint and somewhat uncertain shadows ; but at night the stars shone with surpassing brilliancy. Of the planets, some, it was observed, seemed to be fading away in remote distance. This was the case with Mars, Venus, and that unknown orb which was moving in the orbit of the minor planets ; but Jupiter, on the other hand, had assumed splendid proportions ; Saturn was superb in its lustre, and Uranus, which hitherto had been imperceptible without a telescope, was pointed out by Lieutenant Procope, plainly visible to the naked eye. The inference was irresistible that Gallia was receding from the sun, and travelling far away across the planetary regions.

On the 24th of February, after following the sinuous course of what before the date of the convulsion had been the coast line of the department of Var, and after a fruitless search for Hyères, the peninsula of St. Tropez, the Lérius Islands, and the gulfs of Cannes and Jouar, the *Dobryna* arrived upon the site of the Cape of Antibes.

Here, quite unexpectedly, the explorers made the discovery that the massive wall of cliff had been rent from the

top to the bottom by a narrow rift, like the dry bed of a mountain torrent, and at the base of the opening, level with the sea, was a little strand upon which there was just space enough for their boat to be hauled up.

"Joy ! joy !" shouted Servadac, half beside himself with ecstasy ; " we can land at last ! "

Count Timascheff and the Lieutenant were scarcely less impatient than the Captain, and little needed his urgent and repeated solicitations :

" Come on ! Quick ! Come on ! no time to lose ! "

It was half-past seven a.m. when they set their foot upon this untried land. The bit of strand was only a few square yards in area, quite a narrow strip. Upon it might have been recognised some fragments of that agglutination of yellow limestone which is characteristic of the coast of Provence. But the whole party was far too eager to wait and examine these remnants of the ancient shore ; they hurried on to scale the heights.

The narrow ravine was not only perfectly dry, but manifestly had never been the bed of any mountain torrent. The rocks that rested at the bottom—just as those which formed its sides—were of the same lamellous formation as the entire coast, and had not hitherto been subject to the disaggregation which the lapse of time never fails to work. A skilled geologist would probably have been able to assign them their proper scientific classification, but neither Servadac, Timascheff, nor the Lieutenant could pretend to any acquaintance with their specific character.

Although, however, the bottom of the chasm had never as yet been the channel of a stream, indications were not wanting that at some future time it would be the natural outlet of accumulated waters ; for already, in many places, thin layers of snow were glittering upon the surface of the fractured rocks, and the higher the elevation that was gained, the more these layers were found to increase in area and in depth.

" Here is a trace of fresh water, the first that Gallia has

exhibited," said the Count to his companions, as they toiled up the precipitous path.

"And probably," replied the Lieutenant, "as we ascend we shall find not only snow but ice. We must suppose this Gallia of ours to be a sphere, and if it is so, we must now be very close to her Arctic regions ; it is true that her axis is not so much inclined as to prolong day and night as at the poles of the earth, but the rays of the sun must reach us here only very obliquely, and the cold, in all likelihood, will be intense."

"So cold, do you think," asked Servadac, "that animal life must be extinct?"

"I do not say that, Captain," answered the Lieutenant ; "for, however far our little world may be removed from the sun, I do not see why its temperature should fall below what prevails in those outlying regions beyond our system where sky and air are not."

"And what temperature may that be?" inquired the Captain with a shudder.

"Fourier estimates that even in those vast unfathomable tracts the temperature never descends lower than 60° ," said Procope.

"Sixty ! Sixty degrees below zero !" cried the Count. "Why, there's not a Russian could endure it !"

"I beg your pardon, Count. It is placed on record that the English *have* survived it, or something quite approximate, upon their Arctic expeditions. When Captain Parry was on Melville Island, he knew the thermometer to fall to 56° ."

As the explorers advanced, they seemed glad to pause from time to time, that they might recover their breath ; for the air, becoming more and more rarefied, made respiration somewhat difficult and the ascent fatiguing. Before they had reached an altitude of 600 feet they noticed a sensible diminution of the temperature ; but neither cold nor fatigue deterred them, and they were resolved to persevere. Fortunately, the deep striæ or furrows in the

surface of the rocks that made the bottom of the ravine in some degree facilitated their progress, but it was not until they had been toiling up for two hours more that they succeeded in reaching the summit of the cliff.

Eagerly and anxiously did they look around. To the south there was nothing but the sea they had traversed ; to the north, nothing but one drear, inhospitable stretch.

Servadac could not suppress a cry of dismay. Where was his beloved France ? Had he gained this arduous height only to behold the rocks carpeted with ice and snow, and reaching interminably to the far-off horizon ? His heart sank within him.

The whole region appeared to consist of nothing but the same strange, uniform mineral conglomerate, crystallised into regular hexagonal prisms. But whatever was its geological character, it was only too evident that it had entirely replaced the former soil, so that not a vestige of the old Continent of Europe could be discerned. The lovely scenery of Provence, with the grace of its rich and undulating landscape ; its gardens of citrons and oranges rising tier upon tier from the deep red soil ; its long avenues of pepper-plants, mimosas, palm-trees, and eucalyptus ; its bowers of clambering geraniums, interspersed with glowing gladioli and crowned with the clustering yuccas ; its rocks upon the shore, oxydized with the most radiant of tints ; and the mountains in the background, clad in their vesture of dark conifers—all, all had vanished. Of the vegetable kingdom, there was not a single representative ; the most meagre of Arctic plants, the most insignificant of lichens, could obtain no hold upon that stony waste. Nor did the animal world assert the feeblest sway ; no petrel, puffin, or guillemot could find a meal upon that wide expanse of arid rock. The mineral kingdom reigned supreme.

Captain Servadac's deep dejection was in strange contrast to his general hilarity. Silent and tearful, he stood upon an ice-bound rock, straining his eyes across the boundless vista of the myterious territory.

"It cannot be!" he exclaimed. "We must somehow have mistaken our bearing. True, we have encountered this barrier; but France is there beyond! Yes, France is *there*! Come, Count, come! By all that's pitiful, I entreat you come and explore the farthest verge of the ice-bound track!"

He pushed onwards along the rugged surface of the rock, but had not proceeded far before he came to a sudden pause. His foot had come in contact with something hard beneath the snow, and, stooping down, he picked up a little block of stony substance, which the first glance revealed to be of a geological character altogether alien to the universal rocks around. It proved to be a fragment of discoloured marble, on which several letters were inscribed, of which the only part at all decipherable was the syllable "Vil."

"Vil—Villa!" he cried out, in his excitement dropping the marble, which was broken into atoms by the fall.

What else could this fragment be but the sole surviving remnant of some sumptuous mansion that once had stood on this unrivalled site? Was it not the residue of some edifice that had crowned the luxuriant headland of Antibes, overlooking Nice, and commanding the gorgeous panorama that embraced the Maritime Alps and reached beyond Monaco and Mentone to the Italian height of Bordighera? And did it not give in its sad and too convincing testimony that Antibes itself had been involved in the great destruction?

Servadac gazed upon the shattered marble, pensive and disheartened.

Count Timascheff laid his hand kindly on the Captain's shoulder, and said:

"My friend, do you not remember the motto of the old Hope family?"

He shook his head mournfully.

"*Orbe fracto, spes illasa*," continued the Count—"Though the world be shattered, hope is unimpaired."

Servadac smiled faintly, and replied that he felt rather compelled to take up the despairing cry of Dante :

“ All hope abandon, ye who enter here.”

“ Nay, not so,” answered the Count ; “ for the present at least, let our maxim be *Nil desperandum* ! ”

CHAPTER XVII

A SECOND ENIGMA

UPON re-embarking, the bewildered explorers began to discuss the question whether it would not now be desirable to make their way back to Gourbi Island, which was apparently the only spot in their new world from which they could hope to derive their future sustenance. Captain Servadac tried to console himself with the reflection that Gourbi Island was, after all, a fragment of a French colony, and as such almost like a bit of his dear France ; and the plan of returning thither was on the point of being adopted, when Lieutenant Procope remarked that they ought to remember that they had not hitherto made an entire circuit of the new shores of the sea on which they were sailing.

“ We have,” he said, “ neither investigated the northern shore from the site of Cape Antibes to the strait that brought us to Gibraltar, nor have we followed the southern shore that stretches from the strait to the Gulf of Cables. It is the old coast, and not the new, that we have been tracing : as yet, we cannot say positively that there is no outlet to the south ; as yet, we cannot assert that no oasis of the African desert has escaped the catastrophe. Perhaps, even here in the north, we may find that Italy and Sicily and the larger island of the Mediterranean may still maintain their existence.”

“ I entirely concur with you,” said Count Timascheff. “ I quite think we ought to make our survey of the confines of

this new basin as complete as possible before we withdraw."

Servadac, although he acknowledged the justness of these observations, could not help pleading that the explorations might be deferred until after a visit had been paid to Gourbi Island.

"Depend upon it, Captain, you are mistaken," replied the Lieutenant; "the right thing to do is to use the *Dobryna* while she is available."

"Available! What do you mean?" asked the Count, somewhat taken by surprise.

"I mean," said Procope, "that the further this Gallia of ours recedes from the sun, the lower the temperature will fall. It is likely enough, I think, that before long the sea will be frozen over, and navigation will be impossible. Already you have learned something of the difficulties of traversing a field of ice, and I am sure, therefore, you will acquiesce in my wish to continue our explorations while the water is still open."

"No doubt you are right, Lieutenant," said the Count. "We will continue our search while we can for some remaining fragment of Europe. Who shall tell whether we may not meet with some more survivors from the catastrophe, to whom it might be in our power to afford assistance, before we go into our winter quarters?"

Generous and altogether unselfish as this sentiment really was, it was obviously to the general interest that they should become acquainted, and if possible establish friendly relations, with any human inhabitant who might be sharing their own strange destiny in being rolled away upon a new planet into the infinitude of space. All difference of race, all distinction of nationality, must be merged into the one thought that, few as they were, they were the sole surviving representatives of a world which it seemed exceedingly improbable that they would ever see again; and common sense dictated that they were bound to direct all their energies to insure that their asteroid should at least have a united and sympathising population.

It was on the 25th of February that the yacht left the little creek in which she had taken refuge, and setting off at full steam eastwards, she continued her way along the northern shore. A brisk breeze tended to increase the keenness of the temperature, the thermometer being, on an average, about two degrees below zero. Salt water freezes only at a lower temperature than fresh ; the course of the *Dobryna* was therefore unimpeded by ice, but it could not be concealed that there was the greatest necessity to maintain the utmost possible speed.

The nights continued lovely ; the chilled condition of the atmosphere prevented the formation of clouds ; the constellations gleamed forth with unsullied lustre ; and, much as Lieutenant Procope, from nautical considerations, might regret the absence of the moon, he could not do otherwise than own that the magnificent nights of Gallia were such as must awaken the enthusiasm of an astronomer. And, as if to compensate for the loss of the moonlight, the heavens were illuminated by a superb shower of falling stars, far exceeding, both in number and in brilliancy, the phenomena which are commonly distinguished as the August and November meteors ; in fact, Gallia was passing through that meteoric ring which is known to lie exterior to the earth's orbit, but almost concentric with it. The luminous bodies seemed to radiate from Algol, in the constellation of Perseus, and the friction of the atmosphere enveloping the planetoid not only somewhat arrested the velocity with which they were travelling, but caused them to glow with an intenser lustre that was truly marvellous. During the memorable star-shower of 1833, Ohnsted estimated that, at Boston, as many as 34,000 of these meteors darted across the firmament, but on this occasion it may safely be affirmed that there was at least ten times that number. No display of fireworks, even of the elaborate rockets devised by the master-hand of a Ruggieri or a Brock, could compare with the gorgeous spectacle. The rocky coast, its metallic surface reflecting the glow of the

dazzling luminaries, appeared literally stippled with light, whilst the sea, as though spattered with burning hailstones, shone with a phosphorescence that was perfectly splendid. So great, however, was the speed at which Gallia was receding from the sun, that this meteoric storm lasted scarcely more than four and twenty hours.

Next day the direct progress of the *Dobryna* was arrested by a long projection of land, which obliged her to turn southwards, until she reached what formerly would have been the southern extremity of Corsica. Of this, however, there was now no trace ; the Strait of Bonifacio had been replaced by a vast expanse of water, which had at first all the appearance of being utterly desert ; but on the following morning the explorers unexpectedly sighted a little island, which (unless it should prove, as was only too likely, to be of recent origin) they concluded, from its situation, must be a portion of the northernmost territory of Sardinia.

The *Dobryna* approached the land as nearly as was prudent, the boat was lowered, and in a few minutes the Count and Servadac had landed upon the islet, which was a mere plot of meadow land, not much more than two acres in extent, dotted here and there with a few myrtle-bushes and lentisks, interspersed with some ancient olives. Having ascertained, as they imagined, that the spot was devoid of living creature, they were on the point of returning to their boat, when their attention was arrested by a faint bleating, and immediately afterwards a solitary she-goat came bounding towards the shore. The creature had dark, almost black hair, and small curved horns, and was a specimen of that domestic breed which, with considerable justice, has gained for itself the title of "the poor man's cow." So far from being alarmed at the presence of strangers, the goat ran nimbly towards them, and then, by its movements and plaintive cries, seemed to be enticing them to follow it.

"Come," said Servadac ; "let us see where it will lead us ; it is more than probable it is not alone."

The Count agreed ; and the animal, as if comprehending what was said, trotted on gently for about a hundred paces, and stopped in front of a kind of cave or burrow that was half concealed by a grove of lentisks. Here a little girl, seven or eight years of age, with rich brown hair and lustrous dark eyes, beautiful as one of Murillo's angels, was peeping shyly through the branches. Apparently discovering nothing in the aspect of the strangers to excite her apprehensions, the child suddenly gained confidence, darted forwards with outstretched hands, and in a voice soft and melodious as the language which she spoke, said in Italian :

" I like you ; you will not hurt me, will you ? "

" Hurt you, my child ? " answered Servadac. " No, indeed ; we will be your friends ; we will take care of you."

And after a few moments' scrutiny of the pretty maiden, he added :

" Tell us your name, little one."

" Nina ! " was the child's reply.

" Well, then, Nina, can you tell us where we are ? "

" At Madalena, I think," said the little girl ; " at least I know I was there when that dreadful shock came and altered everything."

The Count knew that Madalena was close to Caprera, to the north of Sardinia, which had entirely disappeared in the disaster. By dint of a series of questions, he gained from the child a very intelligent account of her experiences. She told him that she had no parents, and had been employed in taking care of a flock of goats belonging to one of the landowners, when one day, all of a sudden, everything around her, except this little piece of land, had been swallowed up, and that she and Marzy, her pet goat, had been left quite alone. She went on to say that at first she had been very frightened ; but when she found that the earth did not shake any more, she had thanked the great God, and had soon made herself very happy living with Marzy. She had enough food, she said, and had been

waiting for a boat to fetch her, and now a boat had come and she was quite ready to go away ; only they must let her goat go with her : they would both like so much to get back to the old farm.

“ Here, at least, is one nice little inhabitant of Gallia,” said Captain Servadac, as he caressed the child and conducted her to the boat.

Half an hour later, both Nina and Marzy were safely quartered on board the yacht. It is needless to say that they received the heartiest of welcomes. The Russian sailors, ever superstitious, seemed almost to regard the coming of the child as the appearance of an angel ; and, incredible as it may seem, more than one of them wondered whether she had wings, and amongst themselves they commonly referred to her as “ the little Madonna.”

Soon out of sight of Madalena, the *Dobryna* for some hours held a south-easterly course along the shore, which here was fifty leagues in advance of the former coast-line of Italy, demonstrating that a new continent must have been formed, substituted as it were for the old peninsula, of which not a vestige could be identified. At a latitude corresponding with the latitude of Rome, the sea took the form of a deep gulf, extending back far beyond the site of the Eternal City ; the coast making a wide sweep round to the former position of Calabria, and jutting far beyond the outline of “ the boot,” which Italy resembles. But the beacon of Messina was not to be discerned ; no trace, indeed, survived of any portion of Sicily ; the very peak of Etna, 11,000 feet as it had reared itself above the level of the sea, had vanished utterly.

Another sixty leagues to the south, and the *Dobryna* sighted the entrance of the strait which had afforded her so providential a refuge from the tempest, and had conducted her to the fragmentary relic of Gibraltar. Hence to the Gulf of Cades had been already explored, and as it was universally allowed that it was unnecessary to renew the search in that direction, the Lieutenant started off in a

transverse course, towards a point hitherto uninvestigated. That point was reached on the 3rd of March, and thence the coast was continuously followed, as it led through what had been Tunis, across the province of Constantine, away to the oasis of Ziban ; where, taking a sharp turn, it first reached a latitude of 320, and then returned again, thus forming a sort of irregular gulf, enclosed by the same unvarying border of mineral concrete. This colossal boundary then stretched away for nearly 150 leagues over the Sahara desert, and, extending to the south of Gourbi Island, occupied what, if Morocco had still existed, would have been its natural frontier.

Adapting her course to these deviations of the coast-line, the *Dobryna* was steering northwards, and had barely reached the limit of the bay, when the attention of all on board was arrested by the phenomenon of a volcano, at least 3,000 feet high, its crater crowned with smoke, which occasionally was streaked by tongues of flame.

"A burning mountain !" they exclaimed.

"Gallia, then, has some internal heat," said Servadac.

"And why not, Captain ?" rejoined the Lieutenant. "If our asteroid has carried with it a portion of the old earth's atmosphere, why should it not likewise retain something of its central fire ?"

"Ah, well !" said the Captain, shrugging his shoulders, "I dare say there is caloric enough in our little world to supply the wants of its population."

Count Timascheff interrupted the silence that followed this conversation by saying :

"And now, gentlemen, as our course has brought us on our way once more towards Gibraltar, what do you say to our renewing our acquaintance with the Englishmen ? They will be interested in the result of our voyage."

"For my part," said Servadac, "I have no desire that way. They know where to find Gourbi Island ; they can betake themselves thither just when they please. They have plenty of provisions. If the water freezes, 120 leagues

is no very great distance. The reception they gave us was not so cordial that we need put ourselves out of the way to repeat our visit."

"What you say is too true," replied the Count. "I hope we shall show them better manners when they condescend to visit us."

"Ay," said Servadac, "we must remember that we are all one people now ; no longer Russian, French, or English. Nationality is extinct."

"I am sadly afraid, however," continued the Count, "that an Englishman will be an Englishman ever."

"Yes," said the Captain, "that is always their failing."

And thus all further thought of making their way again to the little garrison of Gibraltar was abandoned.

But even if their spirit of courtesy had disposed them to renew their acquaintance with the British officers, there were two circumstances that just then would have rendered such a proposal very inadvisable. In the first place, Lieutenant Procope was convinced that it could not be much longer now before the sea would be entirely frozen ; and, besides this, the consumption of their coal, through the speed they had maintained, had been so great that there was only too much reason to fear that fuel would fail them. Anyhow, the strictest economy was necessary, and it was accordingly resolved that the voyage should not be much prolonged. Beyond the volcanic peak, moreover, the waters seemed to expand into a boundless ocean, and it might be a thing full of risk to be frozen up while the yacht was so inadequately provisioned. Taking all these things into account, it was agreed that further investigations should be deferred to a more favourable season, and that, without delay, the *Dobryna* should return to Gourbi Island.

This decision was especially welcome to Hector Servadac, who, throughout the whole of the last five weeks, had been agitated by much anxious thought on account of the faithful servant he had left behind.

The transit from the volcano to the island was not long, and was marked by only one noticeable incident. This was the finding of a second mysterious document, in character precisely similar to what they had found before. The writer of it was evidently engaged upon a calculation, probably continued from day to day, as to the motions of the planet Gallia upon its orbit, and committing the results of his reckonings to the waves as the channel of communication.

Instead of being enclosed in a telescope-case, it was this time secured in a preserved-meat tin, hermetically sealed, and stamped with the same initials on the wax that fastened it. The greatest care was used in opening it, and it was found to contain the following message :—

“ Gallia (?)
 Ab sole, au 1 mars, dist. 78,000,000 l. !
 Chemin parcouru de fév. à mars : 59,000,000 l. !
Va bene ! All right ! Nil desperandum !
 Enchanté ! ”

“ Another enigma ! ” exclaimed Servadac ; “ and still no intelligible signature, and no address. No clearing up of the mystery ! ”

“ I have no doubt, in my own mind,” said the Count, “ that it is one of a series. It seems to me probable that they are being sent broadcast upon the sea.”

“ I wonder where the hare-brained *savant* that writes them can be living ? ” observed Servadac.

“ Very likely he may have met with the fate of Æsop’s abstracted astronomer, who found himself at the bottom of a well.”

“ Ay ; but where *is* that well ? ” demanded the Captain.

This was a question which the Count was incapable of settling ; and they could only speculate afresh as to whether the author of the riddles was dwelling upon some solitary island, or, like themselves, was navigating the waters of the new Mediterranean. But they could detect nothing to guide them to a definite decision.

After thoughtfully regarding the document for some

time, Lieutenant Procope proceeded to observe that he believed the paper might be considered as genuine, and accordingly, taking its statements as reliable, he deduced two important conclusions : first, that whereas, in the month of January, the distance travelled by the planet (hypothetically called Gallia) had been recorded as 82,000,000 leagues, the distance travelled in February was only 59,000,000 leagues—a difference of 23,000,000 leagues in one month ; secondly, that the distance of the planet from the sun, which on the 15th of February had been 59,000,000 leagues, was on the 1st of March 78,000,000 leagues—an increase of 19,000,000 leagues in a fortnight. Thus, in proportion as Gallia receded from the sun, so did the rate of speed diminish by which she travelled along her orbit ; facts to be observed in perfect conformity with the known laws of celestial mechanism.

“ And your inference ? ” asked the Count.

“ My inference,” replied the Lieutenant, “ is a confirmation of my surmise that we are following an orbit decidedly elliptical, although we have not yet the material to determine its eccentricity.”

“ As the writer adheres to the appellation of Gallia, do you not think,” asked the Count, “ that we might call these new waters the Gallian Sea ? ”

“ There can be no reason to the contrary, Count,” replied the Lieutenant ; “ and as such I will insert it upon my new chart.”

“ Our friend,” said Servadac, “ seems to be more and more gratified with the condition of things ; not only has he adopted our motto, ‘ *Nil desperandum !* ’ but see how enthusiastically he has wound up with his ‘ *Enchanté !* ’ ”

The conversation dropped.

A few hours later the man on watch announced that Gourbi Island was in sight.

CHAPTER XVIII

AN UNEXPECTED POPULATION

The *Dobryna* was now back again at the island. Her cruise had lasted from the 31st of January to the 5th of March, a period of thirty-five days (for it was leap-year), corresponding to seventy days as accomplished by the new little world.

Many a time during his absence Hector Servadac had wondered how his present vicissitudes would end, and he had felt some misgivings as to whether he should ever again set foot upon the island, and see his faithful orderly, so that it was not without emotion that he had approached the coast of the sole remaining fragment of Algerian soil. But his apprehensions were groundless ; Gourbi Island was just as he had left it, with nothing unusual in its aspect, except that a very peculiar cloud was hovering over it, at an altitude of little more than a hundred feet. As the yacht approached the shore, this cloud appeared to rise and fall as if acted upon by some invisible agency, and the captain, after watching it carefully, perceived that it was not an accumulation of vapours at all, but a dense mass of birds packed as closely together as a swarm of herrings, and uttering deafening and discordant cries, amidst which from time to time the noise of the report of a gun could be plainly distinguished.

The *Dobryna* signalled her arrival by firing her cannon, and dropped anchor in the little port of the Shelif. Almost within a minute Ben Zoof was seen running, gun in hand, towards the shore ; he cleared the last ridge of rocks at a single bound, and then suddenly halted. For a few seconds he stood motionless, his eyes fixed, as if obeying the instructions of a drill-sergeant, on a point some fifteen yards distant, his whole attitude indicating submission and respect ; but the sight of the Captain, who was landing, was too much for his equanimity, and darting forward, he seized his master's hand and covered it with kisses.

Instead, however, of uttering any expressions of welcome or rejoicing at the Captain's return, Ben Zoof broke out into the most vehement ejaculations :

"Thieves, Captain ! beastly thieves ! Bedouins ! pirates ! devils !"

"Why, Ben Zoof, what's the matter ?" said Servadac soothingly.

"They are thieves ! downright, desperate thieves ! those infernal birds ! That's what's the matter. It is a good thing you have come. Here have I for a whole month been spending my powder and shot upon them, and the more I kill them, the worse they get ; and yet, if I were to leave them alone, we should not have a grain of corn upon the island."

It was soon evident that the orderly had only too much cause for alarm. The crops had ripened rapidly during the excessive heat of January, when the orbit of Gallia was being traversed at its perihelion, and were now exposed to the depredations of many thousands of birds ; and although a goodly number of stacks attested the industry of Ben Zoof during the time of the *Dobryna's* voyage, it was only too apparent that the portion of the harvest that remained ungathered was liable to the most imminent risk of being utterly devoured. It was, perhaps, only natural that this clustered mass of birds, as representing the whole of the feathered tribe upon the surface of Gallia, should resort to Gourbi Island, of which the meadows seemed to be the only spot from which they could get sustenance at all ; but as this sustenance would be obtained at the expense, and probably to the serious detriment, of the human population, it was absolutely necessary that every possible resistance should be made to the devastation that was threatened.

Once satisfied that Servadac and his friends would co-operate with him in the raid upon "the thieves," Ben Zoof became calm and content, and began to make various inquiries.

"And what has become," he said, "of all our old comrades in Africa?"

"As far as I can tell you," answered the Captain, "they are all in Africa still; only Africa isn't by any means where we expected to find it."

"And France? Montmartre?" continued Ben Zoof eagerly.

Here was the cry of the poor fellow's heart.

As briefly as he could, Servadac endeavoured to explain the true condition of things; he tried to communicate the fact that Paris, France, Europe, nay, the whole world was more than eighty millions of leagues away from Gourbi Island; as gently and cautiously as he could he expressed his fear that they might never see Europe, France, Paris, Montmartre again.

"No, no, sir!" protested Ben Zoof emphatically; "that is all nonsense. It is altogether out of the question to suppose that we are not to see Montmartre again."

And the orderly shook his head resolutely, with the air of a man determined, in spite of argument, to adhere to his own opinion.

"Very good, my brave fellow," replied Servadac; "hope on, hope while you may.' The message has come to us over the sea, 'Never despair; but one thing, nevertheless, is certain; we must forthwith commence arrangements for making this island our permanent home.'"

Captain Servadac now led the way to the gourbi, which, by his servant's exertions, had been entirely rebuilt; and here he did the honours of his modest establishment to his two guests, the Count and the Lieutenant, and gave a welcome, too, to little Nina, who had accompanied them on shore, and between whom and Ben Zoof the most friendly relations had already been established.

The adjacent building continued in good preservation, and Captain Servadac's satisfaction was very great in finding the two horses, Zephyr and Galette, comfortably housed there and in good condition.

After the enjoyment of some refreshment, the party proceeded to a general consultation as to what steps must be taken for their future welfare. The most pressing matter that came before them was the consideration of the means to be adopted to enable the inhabitants of Gallia to survive the terrible cold, which, in their ignorance of the true eccentricity of their orbit, might, for aught they knew, last for an almost indefinite period. Fuel was far from abundant ; of coal there was none ; trees and shrubs were few in number, and to cut them down in prospect of the cold seemed a very questionable policy ; but there was no doubt some expedient must be devised to prevent disaster, and that without delay.

The victualling of the little colony offered no immediate difficulty. Water was abundant, and the cisterns could hardly fail to be replenished by the numerous streams that meandered along the plains ; moreover, the Gallian Sea would ere long be frozen over, and the melted ice (water in its congealed state being divested of every particle of salt) would afford a supply of drink that could not be exhausted. The crops that were now ready for the harvest, and the flocks and herds scattered over the island, would form an ample reserve. There was little doubt that throughout the winter the soil would remain unproductive, and no fresh fodder for domestic animals could then be obtained ; it would therefore be necessary, if the exact duration of Gallia's year should ever be calculated, to proportion the number of animals to be reserved to the real length of the winter.

The next thing requisite was to arrive at a true estimate of the number of the population. Without including the thirteen Englishmen at Gibraltar, about whom he was not particularly disposed to give himself much concern at present, Servadac put down the names of the eight Russians, the two Frenchmen, and the little Italian girl, eleven in all, as the entire list of the inhabitants of Gourbi Island.

"Oh, pardon me," interposed Ben Zoof, "you are mistaking the state of the case altogether. You will be surprised to learn that there are twenty-two people on the island."

"Twenty-two!" exclaimed the Captain; "twenty-two people on this island? What do you mean?"

"The opportunity has not occurred," answered Ben Zoof, "for me to tell you before, but I have had company here."

"Explain yourself, Ben Zoof," said Servadac. "What company have you had?"

"You could not suppose," replied the orderly, "that my own unassisted hands could have accomplished all the harvest-work that you see has been done."

"I confess," said Lieutenant Procope, "we do not seem to have noticed that."

"Well, then," said Ben Zoof, "if you will be good enough to come with me for about a mile, I shall be able to show you my companions. But we must take our guns," he added.

"Why take our guns?" asked Servadac. "I hope we are not going to fight."

"No, not with men," said Ben Zoof; "but it does not answer to throw a chance away for giving battle to those thieves of birds."

Leaving little Nina and her goat in the gourbi, Servadac, Count Timascheff, and the Lieutenant, greatly mystified, took up their guns and followed the orderly. All along their way they made unsparing slaughter of the birds that hovered over and around them. Nearly every species of the feathered tribe seemed to have its representative in that living cloud. There were wild ducks in thousands; snipe, larks, rooks, and swallows; a countless variety of sea-birds—widgeons, gulls, and seamews; besides a quantity of game—quails, partridges, and woodcocks. The sportsmen did their best; every shot told; and the depredators fell by dozens on either hand.

Instead of following the northern shore of the island, Ben Zoof cut obliquely across the plain. Making their

progress with the unwonted rapidity which was attributable to their specific lightness, Servadac and his companions soon found themselves near a grove of sycamores and eucalyptus massed in picturesque confusion at the base of a little hill. Here they halted.

"Ah ! the vagabonds ! the rascals ! the thieves !" suddenly exclaimed Ben Zoof, stamping his foot with rage.

"How now ? Are your friends the birds at their pranks again ?" asked the captain.

"No, I don't mean the birds : I mean those lazy beggars that are shirking their work. Look here ; look there !" And as Ben Zoof spoke, he pointed to some scythes, and sickles, and other implements of husbandry that had been left upon the ground.

"What is it you mean ?" asked Servadac, getting somewhat impatient.

"Hush, hush ! listen" was all Ben Zoof's reply ; and he raised his finger as if in warning.

Listening attentively, Servadac and his associates could distinctly recognise a human voice, accompanied by the notes of a guitar and by the measured click of castanets.

"Spaniards !" said Servadac.

"No mistake about that, sir," replied Ben Zoof ; "a Spaniard would rattle his castanets at the cannon's mouth."

"But what is the meaning of it all ?" asked the Captain, more puzzled than before.

"Hark !" said Ben Zoof ; "it is the old man's turn now."

And then a voice, at once gruff and harsh, was heard vociferating :

"My money ! my money ! when will you pay me my money ? Pay me what you owe me, you miserable majos."

Meanwhile the song continued :

"Tu sandunga y cigarro,
Y una cana de Jerez,
Mi jamelgo y un trabuco,
Que mas gloria puede haver ?

“ Para Alcarrazas, chichana,
Para trigo, Trebujena,
Y para ninas bonitas,
San Lucar de Barrameda.”

Servadac's knowledge of Gascon enabled him partially to comprehend the rollicking tenor of the Spanish patriotic air, but his attention was again arrested by the voice of the old man growling savagely :

“ Pay me you shall ; yes, by the God of Abraham, you shall pay me.”

“ A Jew ! ” exclaimed Servadac.

“ Ay, sir, and worst of all, a German Jew,” said Ben Zoof.

The party was now just on the point of entering the thicket, when a singular spectacle made them pause. A group of Spaniards had just begun dancing their national fandango, and the extraordinary lightness which had become the physical property of every object in the new planet made the dancers bound to a height of thirty feet or more into the air, considerably above the tops of the trees. What followed was irresistibly comic. Four sturdy majos had dragged along with them an old man incapable of resistance, and compelled him, *nolens volens*, to join in the dance ; and as they all kept appearing and disappearing above the bank of foliage, their grotesque attitudes, combined with the pitiable countenance of their helpless victim, could not do otherwise than recall most forcibly the story of Sancho Panza tossed in a blanket by the merry drapers of Segovia.

Servadac, the Count, Procope, and Ben Zoof now proceeded to make their way through the thicket until they came to a little glade, where they came upon two men stretched idly on the grass, one of them playing the guitar, and the other a pair of castanets ; both were exploding with laughter, as they urged the performers to greater and yet greater exertions in the dance. At the sight of strangers they paused in their music, and

simultaneously the dancers, with their victim, alighted gently on the sward. Breathless and half exhausted as was the Jew, he rushed with an effort towards Servadac, and exclaimed in French, marked by a strong Teutonic accent :

“ Oh, my lord Governor, help me, help ! These rascals defraud me of my rights ; they rob me ; but, in the name of the God of Israel, I ask you to see justice done ! ”

The Captain glanced inquiringly towards Ben Zoof, and the orderly, by a significant nod, made his master understand that he was to play the part that was implied by the title. He took the cue, and promptly ordered the Jew to hold his tongue at once. The man bowed his head in servile submission, and folded his hands upon his breast.

Servadac surveyed him leisurely.

He was a man of about fifty, but from his appearance might well have been taken for at least ten years older. Small and skinny, with eyes bright and cunning, a hooked nose, a short yellow beard, unkempt hair, huge feet, and long bony hands, he presented all the typical characteristics of the German Jew, the heartless, wily usurer, the hardened miser and skinflint. As iron is attracted by the magnet, so was this Shylock attracted by the sight of gold, nor would he have hesitated to draw the lifeblood of his creditors, if by such means he could secure his claims. Although by descent and birth a Jew, he was ready to profess himself a Mahometan or a heathen whenever circumstances arose which he thought might be turned to his own advantage.

His name was Isaac Hakkabut, and he was a native of the Prussian (now German) city of Cologne. Nearly the whole of his time, however, he informed Captain Servadac, had been spent upon the sea, his real business being that of a merchant trading at all the ports of the Mediterranean. A tartan, a small vessel of two hundred tons burden, conveyed his entire stock of merchandise, and, to say the truth, was a sort of floating emporium, conveying nearly every possible article of commerce, from a lucifer match to

the radiant fabrics of Frankfort and Epinal. Without wife or children, and having no settled home, Isaac Hakkabut lived almost entirely on board the *Hansa*, as he had named his tartan ; and engaging a mate, with a crew of three men, as being adequate to work so light a craft, he cruised along the coasts of Algeria, Tunis, Egypt, Turkey, and Greece, visiting, moreover, most of the harbours of the Levant. Careful to be always well supplied with the products in most general demand—coffee, sugar, rice, tobacco, cotton-stuffs, and gunpowder—and being at all times ready to barter, and prepared to deal in second-hand wares, he had contrived to amass considerable wealth.

On the eventful night of the 1st of January the *Hansa* had been at Ceuta, the point on the coast of Morocco exactly opposite Gibraltar. The mate and three sailors had all gone on shore, and, in common with many of their fellow-creatures, had entirely disappeared ; but the most projecting rock of Ceuta had been undisturbed by the general catastrophe, and half a score of Spaniards, who had happened to be upon it, had escaped with their lives. They were all Andalusian majos, agricultural labourers, and naturally as careless and apathetic as men of their class usually are, but they could not help being very considerably embarrassed when they discovered that they were left in solitude upon a detached and isolated rock. They took what mutual counsel they could, but became only more and more perplexed. One of them was named Negrete, and he, as having travelled somewhat more than the rest, was tacitly recognised as a sort of leader ; but although he was by far the most enlightened of them all, he was quite incapable of forming the least conception of the nature of what had occurred. The one thing upon which they could not fail to be conscious was that they had no prospect of obtaining provisions, and consequently their first business was to devise a scheme for getting away from their present abode. The *Hansa* was

lying off shore. The Spaniards would not have had the slightest hesitation in summarily taking possession of her, but their utter ignorance of seamanship made them reluctantly come to the conclusion that the more prudent policy was to make terms with the owner.

And now came a singular part of the story. Negrete and his companions had meanwhile received a visit from two English officers from Gibraltar. What passed between them the Jew did not know ; he only knew that, immediately after the conclusion of the interview, Negrete came to him and ordered him to set sail at once for the nearest point of Morocco. The Jew, afraid to disobey, but with his eye ever upon the main chance, stipulated that at the end of their voyage the Spaniards should pay for their passage—terms to which, as they would to any other, they did not demur, knowing that they had not the slightest intention of giving him a single real.

The *Hansa* had weighed anchor on the 3rd of February. The wind blew from the west, and consequently the working of the tartan was easy enough. The unpractised sailors had only to hoist their sails and, though they were quite unconscious of the fact, the breeze carried them to the only spot upon the little world they occupied which could afford them a refuge.

Thus it fell out that one morning Ben Zoof, from his look-out on Gourbi Island, saw a ship, not the *Dobryna*, appear upon the horizon, and make quietly down towards what had formerly been the right bank of the Shelif.

Such was Ben Zoof's version of what had occurred, as he had gathered it from the new-comers. He wound up his recital by remarking that the cargo of the *Hansa* would be of immense service to them ; he expected, indeed, that Isaac Hakkabut would be difficult to manage, but considered there could be no harm in appropriating the goods for the common welfare, since there could be no opportunity now for selling them.

Ben Zoof added :

"And as to the difficulties between the Jew and his passengers, I told him that the Governor-General was absent on a tour of inspection, and that as soon as he came back he would see everything equitably settled."

Smiling at his orderly's tactics, Servadac turned to Hakkabut, and told him that he would take care that his claims should be duly investigated and all proper demands should be paid.

The man appeared satisfied, and, for the time at least, desisted from his complaints and importunities.

When the Jew had retired, Count Timascheff asked :

"But how in the world can you ever make those fellows pay anything?"

"They have lots of money," said Ben Zoof.

"Not likely," replied the Count ; "when did you ever know Spaniards like them to have lots of money?"

"But I have seen it myself," said Ben Zoof ; "and it is English money."

"English money!" echoed Servadac ; and his mind again reverted (as it had done upon the first mention of a visit from English officers to the Spaniards) to the excursion made by the Colonel and the Major from Gibraltar, and about which they had been so reticent.

"We must inquire more about this," he said.

Then, addressing Count Timascheff, he added :

"Altogether, I think, Count, the countries of Europe are fairly represented by the population of Gallia."

"Truc, Captain," answered the Count ; "we have only a fragment of a world, but it contains natives of France, Russia, Italy, Spain, and England. Even Germany may be said to have a representative in the person of this miserable Jew."

"And even in him," said Servadac, "perhaps we shall not find so indifferent a representative as we at present imagine."

CHAPTER XIX

GALLIA'S GOVERNOR-GENERAL

The Spaniards who had arrived on board the *Hansa* consisted of nine men and a lad of twelve years of age, named Pablo. They all received Captain Servadac, whom Ben Zoof introduced as the Governor-General, with due respect, and partook themselves quickly to their separate tasks. The Captain and his friends, followed at some distance by the eager Jew, soon left the glade and directed their steps towards the coast where the *Hansa* was moored.

As they went they discussed their situation. As far as they had ascertained, except Gourbi Island, the sole surviving fragments of the Old World were four small islands : the bit of Gibraltar occupied by the Englishmen ; Ceuta, which had just been left by the Spaniards ; Madalena, where they had picked up the little Italian girl ; and the site of the tomb of St. Louis on the coast of Tunis. Around these there was stretched out the full extent of the Gallian Sea, which apparently comprised about one-half of the Mediterranean, the whole being encompassed by a barrier like a framework of precipitous cliffs, of an origin and a substance alike unknown.

Of all these spots only two were known to be inhabited : Gibraltar, where the thirteen Englishmen were amply provisioned for some years to come, and their own Gourbi Island. Here there was a population of twenty-two, who would all have to subsist upon the natural products of the soil. It was indeed not to be forgotten that, perchance, upon some remote and undiscovered isle there might be the solitary writer of the mysterious papers which they had found, and if so, that would raise the census of their new asteroid to an aggregate of thirty-six.

Even upon the supposition that at some future date the whole population should be compelled to unite and find a residence upon Gourbi Island, there did not appear any

reason to question but that eight hundred acres of rich soil, under good management, would yield them all an ample sustenance. The only critical matter was how long the cold season would last ; every hope depended upon the land again becoming productive ; at present, it seemed impossible to determine, even if Gallia's orbit were really elliptic, when she would reach her aphelion, and it was consequently necessary that the Gallians for the time being should reckon on nothing beyond their actual and present resources.

These resources were, first, the provisions of the *Dobryna*, consisting of preserved meat, sugar, wine, brandy, and other stores sufficient for about two months ; secondly, the valuable cargo of the *Hansa*, which, sooner or later, the owner, whether he would or not, must be compelled to surrender for the common benefit ; and lastly, the produce of the island, animal and vegetable, which with proper economy might be made to last for a considerable period.

In the course of the conversation, Count Timascheff took an opportunity of saying that, as Captain Servadac had already been presented to the Spaniards as Governor of the island, he thought it advisable that he should really assume that position.

"Every body of men," he observed, "must have a head, and you, as a Frenchman, should, I think, take the command of this fragment of a French colony. My men, I can answer for it, are quite prepared to recognise you as their superior officer."

"Most unhesitatingly," replied Servadac, "I accept the post with all its responsibilities. We understand each other so well that I feel sure we shall try and work together for the common good ; and even if it be our fate never again to behold our fellow-creatures, I have no misgivings but that we shall be able to cope with whatever difficulties may be before us."

As he spoke, he held out his hand. The Count took it,

at the same time making a slight bow. It was the first time since their meeting that the two men had shaken hands ; on the other hand, not a single word about their former rivalry had ever escaped their lips ; perhaps that was all forgotten now.

The silence of a few moments was broken by Servadac saying :

“ Do you not think we ought to explain our situation to the Spaniards ? ”

“ No, no, your Excellency,” burst in Ben Zoof, emphatically ; “ the fellows are chicken-hearted enough already ; only tell them what has happened, and in sheer despondency they will not do another stroke of work.”

“ Besides,” said Lieutenant Procope, who took very much the same view as the orderly, “ they are so miserably ignorant they would be sure to misunderstand you.”

“ Understand or misunderstand,” replied Servadac, “ I do not think it matters. They would not care. They are all fatalists. Only give them a guitar and their castanets, and they will soon forget all care and anxiety. For my own part, I must adhere to my belief that it will be advisable to tell them everything. Have you any opinion to offer, Count ? ”

“ My own opinion, Captain, coincides entirely with yours. I have followed the plan of explaining all I could to my men on board the *Dobryna*, and no inconvenience has arisen.”

“ Well, then, so let it be,” said the Captain ; adding, “ It is not likely that these Spaniards are so ignorant as not to have noticed the change in the length of the days ; neither can they be unaware of the physical changes that have transpired. They shall certainly be told that we are being carried away into unknown regions of space, and that this island is nearly all that remains of the Old World.”

“ Ha, ha ! ” laughed Ben Zoof, aloud ; “ it will be fine sport to watch the old Jew’s face, when he is made to comprehend that he is flying away millions and millions of leagues from all his debtors.”

Isaac Hakkabut was about fifty yards behind, and was

consequently unable to overhear the conversation. He went shambling along, half whimpering and not unfrequently invoking the God of Israel ; but every now and then a cunning light gleamed from his eyes, and his lips became compressed with a grim significance.

None of the recent phenomena had escaped his notice, and more than once he had attempted to entice Ben Zoof into conversation upon the subject ; but the orderly made no secret of his antipathy to him, and generally replied to his advances either by satire or by banter. He told him that he had everything to gain under the new system of nights and days, for, instead of living the Jew's ordinary life of a century, he would reach to the age of two centuries ; and he congratulated him upon the circumstance of things having become so light, because it would prevent him feeling the burden of his years. At another time he would declare that, to an old usurer like him, it could not matter in the least what had become of the moon, as he could not possibly have advanced any money upon her. And when Isaac, undaunted by his jeers, persevered in besetting him with questions, he tried to silence him by saying :

“ Only wait till the Governor-General comes ; he is a shrewd fellow, and will tell you all about it.”

“ But will he protect my property ? ” poor Isaac would ask tremulously.

“ To be sure he will ! He would confiscate it all rather than that you should be robbed of it.”

With this Job's comfort the Jew had been obliged to content himself as best he could, and to await the promised arrival of the Governor.

When Servadac and his companions reached the shore, they found that the *Hansa* had anchored in an exposed bay, protected but barely by a few projecting rocks, and in such a position that a gale rising from the west would inevitably drive her on to the land, where she must be dashed in pieces. It would be the height of folly to leave her in her present moorings ; without loss of time she must be

brought round to the mouth of the Shelif, in immediate proximity to the Russian yacht.

The consciousness that his tartan was the subject of discussion made the Jew give way to such vehement ejaculations of anxiety, that Servadac turned round and peremptorily ordered him to desist from his clamour. Leaving the old man under the surveillance of the Count and Ben Zoof, the Captain, and the Lieutenant stepped into a small boat and were soon alongside the floating emporium.

A very short inspection sufficed to make them aware that both the tartan and her cargo were in a perfect state of preservation. In the hold were sugar-loaves by hundreds, chests of tea, bags of coffee, hogsheads of tobacco, pipes of wine, casks of brandy, barrels of dried herrings, bales of cotton, clothing of every kind, shoes of all sizes, caps of various shape, tools, household utensils, china and earthenware, reams of paper, bottles of ink, boxes of lucifer matches, blocks of salt, bags of pepper and spices, a stock of huge Dutch cheeses, and a collection of almanacks and miscellaneous literature. At a rough guess the value could not be much under £5,000 sterling. A new cargo had been taken in only a few days before the catastrophe, and it had been Isaac Hakkabut's intention to cruise from Ceuta to Tripoli, calling wherever he had reason to believe there was likely to be a market for any of his commodities.

"A fine haul, Lieutenant," said the Captain.

"Yes, indeed," said the Lieutenant; "but what if the owner refuses to part with it?"

"No fear; no fear," replied the Captain. "As soon as ever the old rascal finds that there are no more Arabs or Algerians for him to fleece, he will be ready enough to transact a little business with us. We will pay him by bills of acceptance on some of his old friends in the Old World."

"But why should he want any payment?" inquired the Lieutenant. "Under the circumstances, he must know that you have a right to make a requisition of his goods."

"No, no," quickly rejoined Servadac ; " we will not do that. Just because the fellow is a German we shall not be justified in treating him in German fashion. We will transact our business in a business way. Only let him once realise that he is on a new globe, with no prospect of getting back to the old one, and he will be ready enough to come to terms with us."

"Perhaps you are right," replied the Lieutenant ; " I hope you are. But anyhow, it will not do to leave the tartan here ; not only would she be in danger in the event of a storm, but it is very questionable whether she could resist the pressure of the ice, if the water were to freeze."

"Quite true, Procope ; and accordingly I give you the commission to see that your crew bring her round to the Shelif as soon as may be."

"To-morrow morning it shall be done," answered the Lieutenant, promptly.

Upon returning to the shore, it was arranged that the whole of the little colony should forthwith assemble at the gourbi. The Spaniards were summoned, and Isaac, although he could only with reluctance take his wistful gaze from his tartan, obeyed the Governor's orders to follow.

An hour later and the entire population of twenty-two had met in the chamber adjoining the gourbi. Young Pablo made his first acquaintance with little Nina, and the child seemed highly delighted to find a companion so nearly of her own age.

Leaving the children to entertain each other, Captain Servadac began his address.

Before entering upon further explanation, he said that he counted upon the cordial co-operation of them all for the common welfare.

Negrete interrupted him by declaring that no promises or pledges could be given until he and his countrymen knew how soon they could be sent back to Spain.

"To Spain, do you say ?" asked Servadac.

"To Spain!" echoed Isaac Hakkabut, with a hideous yell. "Do they expect to go back to Spain till they have paid their debts? Your Excellency, they owe me twenty reals apiece for their passage here; they owe me two hundred reals. Are they to be allowed . . . ?"

"Silence, Mordecai, you fool!" shouted Ben Zoof, who was accustomed to call the Jew by any Hebrew name that came uppermost to his memory. "Silence!"

Servadac was disposed to appease the old man's anxiety by promising to see that justice was ultimately done; but in a fever of frantic excitement he went on to implore that he might have the loan of a few sailors to carry his ship to Algiers.

"I will pay you honestly; I will pay you *well*," he cried; but his ingrained propensity for making a good bargain prompted him to add, "provided you do not overcharge me."

Ben Zoof was about again to interpose some angry exclamation; but Servadac checked him, and continued in Spanish:

"Listen to me, my friends. Something very strange has happened. A most wonderful event has cut us off from Spain, from France, from Italy, from every country of Europe. In fact, we have left the Old World entirely. Of the whole earth, nothing remains except this island on which you are now taking refuge. The old globe is far, far away. Our present abode is but an insignificant fragment that is left. I dare not tell you that there is any chance of your ever again seeing your country or your homes."

He paused.

The Spaniards evidently had no conception of his meaning.

Negrete begged him to tell them all again.

He repeated all that he had said, and by introducing some illustrations from familiar things, he succeeded to a certain extent in conveying some faint idea of the convulsion that had happened.

The event was precisely what he had foretold. The communication was received by all alike with the most supreme indifference.

Hakkabut did not say a word. He had listened with manifest attention, his lips twitching now and then as if suppressing a smile.

Servadac turned to him, and asked whether he was still disposed to put out to sea and make for Algiers.

The Jew gave a broad grin, which, however, he was careful to conceal from the Spaniards.

"Your Excellency jests," he said in French ; and turning to Count Timascheff, he added in Russian : "The Governor has made up a wonderful tale."

The Count turned his back in disgust, while the Jew sidled up to little Nina and muttered in Italian :

"A lot of lies, pretty one ; a lot of lies !"

"Confound the knave !" exclaimed Ben Zoof ; "he gabbles every tongue under the sun !"

"Yes," said Servadac ; "but whether he speaks French, Russian, Spanish, German, or Italian, he is neither more nor less than a Jew."

CHAPTER XX

A LIGHT ON THE HORIZON

On the following day, without giving himself any further concern about the Jew's incredulity, the Captain gave orders for the *Hansa* to be shifted round to the harbour of the Shelif. Hakkabut raised no objection, not only because he was aware that the move insured the immediate safety of his tartan, but because he was secretly entertaining the hope that he might entice away two or three of the *Dobryna's* crew and make his escape to Algiers or some other port.

Operations now commenced for preparing proper winter-quarters. Spaniards and Russians alike joined heartily in

the work, the diminution of atmospheric pressure and of the force of attraction contributing such an increase to their muscular force as materially facilitated all their labours.

The first business was to accommodate the building adjacent to the gourbi to the wants of the little colony. Here for the present the Spaniards were lodged, the Russians retaining their berths upon the yacht, while the Jew was permitted to pass his nights upon the *Hansa*. This arrangement, however, could be only temporary. The time could not be far distant when ships' sides and ordinary walls would fail to give an adequate protection from the severity of the cold that must be expected ; the stock of fuel was too limited to keep up a permanent supply of heat in their present quarters, and consequently they must be driven to seek some other refuge, the internal temperature of which would at least be bearable.

The plan that seemed to commend itself most to their consideration was, that they should dig out for themselves some subterraneous pits similar to "silos," such as are used as receptacles for grain. They presumed that when the surface of Gallia should be covered by a thick layer of ice, which is a bad conductor of heat, a sufficient amount of warmth for animal vitality might still be retained in excavations of this kind. After a long consultation they failed to devise any better expedient, and were forced to resign themselves to this species of troglodyte existence.

In one respect they congratulated themselves that they should be better off than many of the whalers in the polar seas, for as it is impossible to get below the surface of a frozen ocean, these adventurers have to seek refuge in huts of wood and snow erected on their ships, which at best can give but slight protection from extreme cold ; but here, with a solid subsoil, the Gallians might hope to dig down a hundred feet or so and secure for themselves a shelter that would enable them to brave the hardest severity of climate.

The order, then, was at once given. The work was commenced. A stock of shovels, mattocks, and pick-axes was brought from the gourbi, and with Ben Zoof as overseer, both Spanish majos and Russian sailors set to work with a will.

It was not long, however, before a discovery, more unexpected than agreeable, suddenly arrested their labours. The spot chosen for the excavation was a little to the right of the gourbi, on a slight elevation of the soil. For the first day everything went on prosperously enough ; but at a depth of eight feet below the surface, the navvies came in contact with a hard surface, upon which all their tools failed to make the slightest impression. Servadac and the Count were at once apprised of the fact, and had little difficulty in recognising the substance that had revealed itself as the very same which composed the shores as well as the subsoil of the Gallian Sea. It evidently formed the universal substructure of the new asteroid. Means for hollowing it failed them utterly. Harder and more resisting than granite, it could not be blasted by ordinary powder ; dynamite alone could suffice to rend it.

The disappointment was very great. Unless some means of protection were speedily devised, death seemed to be staring them in the face. Were the figures in the mysterious documents correct ? and had Gallia, according to physical law, been travelling at a rate that was progressively increasing ? If so, she must now be a hundred millions of leagues from the sun, nearly three times the distance of the earth at the remotest section of her orbit. The intensity of the solar light and heat, too, was very seriously diminishing, although Gourbi Island (being on the equator of an orb which had its axes always perpendicular to the plane in which it revolved) enjoyed a position that gave it a permanent summer. But no advantage of this kind could compensate for the remoteness of the sun. The temperature fell steadily ; already, to the discomfiture of the little Italian girl, nurtured in sunshine, ice was beginning to form in

the crevices of the rocks, and manifestly the time was impending when the sea itself would freeze.

Some shelter must be found before the temperature should fall to 60° below zero. Otherwise death was inevitable. Hitherto, for the last few days, the thermometer had been registering an average of about 6° below zero, and it had become matter of experience that the stove, although replenished with all the wood that was available, was altogether inadequate to effect any sensible mitigation of the severity of the cold. Nor could any amount of fuel be enough. It was certain that ere long the very mercury and spirit in the thermometers would be congealed. Some other resort must assuredly be soon found, or they must perish. That was clear.

The idea of betaking themselves to the *Dobryna* and *Hansa* could not for a moment be seriously entertained ; not only did the structure of the vessels make them utterly insufficient to give substantial shelter, but they were totally unfitted to be trusted as to their stability when exposed to the enormous pressure of the accumulated ice.

Neither Servadac, nor the Count, nor Lieutenant Procope were men to be easily disheartened, but it could not be concealed that they felt themselves in circumstances by which they were equally harassed and perplexed. The sole expedient that their united counsel could suggest was to obtain a refuge below ground, and *that* was denied them by the strange and impenetrable substratum of the soil ; yet hour by hour the sun's disc was lessening in its dimensions, and although at midday some faint radiance and glow were to be distinguished, during the night the painfulness of the cold was becoming almost intolerable.

Mounted upon Zephyr and Galette, the Captain and the Count scoured the island in search of some available retreat. Scarcely a yard of ground was left unexplored, the horses clearing every obstacle as if they were, like Pegasus, furnished with wings. But all in vain. Soundings were made again and again, but invariably with the same

result ; the rock, hard as adamant, never failed to reveal itself within a few feet of the surface of the ground.

The excavation of any silo being thus manifestly hopeless, there seemed nothing to be done except to try and render the building alongside the gourbi impervious to frost. To contribute to the supply of fuel, orders were given to collect every scrap of wood, dry or green, that the island produced ; and this involved the necessity of felling the numerous trees that were scattered over the plain. But toil as they might at the accumulation of firewood, Captain Servadac and his companions could not resist the conviction that the consumption of a very short period would exhaust the total stock. And what would happen then ?

Studious if possible to conceal his real misgivings, and anxious that the rest of the party should be affected as little as might be by his own uneasiness, Servadac would wander alone about the island, racking his brain for an idea that would point the way out of the serious difficulty. But still all in vain.

One day he suddenly came upon Ben Zoof, and asked him whether he had no plan to propose. The orderly shook his head, but after a few moments' pondering, said :

" Ah ! master, if only we were at Montmartre, we would get shelter in the charming stone-quarries."

" Idiot ! " replied the Captain, angrily, " if we were at Montmartre, you don't suppose that we should need to live in stone-quarries ? "

But the means of preservation which human ingenuity had failed to secure were at hand from the felicitous provision of Nature herself.

It was on the 10th of March that the Captain and Lieutenant Procope started off once more to investigate the north-west corner of the island ; on their way their conversation naturally was engrossed by the subject of the dire necessities which only too manifestly were awaiting them. A discussion more than usually animated arose between them, for the two men were not altogether of the

same mind as to the measures that ought to be adopted in order to open the fairest chance of avoiding a fatal climax to their exposure ; the Captain persisted that an entirely new abode must be sought, while the Lieutenant was equally bent upon devising a method of some sort by which their present quarters might be rendered sufficiently warm. All at once, in the very heat of his argument, Procope paused ; he passed his hand across his eyes, as if to dispel a mist, and stood, with a fixed gaze centred on a point towards the south.

"What is that?" he said, with a kind of hesitation. "No, I am not mistaken," he added ; "it is a light on the horizon."

"A light!" exclaimed Servadac : "show me where."

"Look there!" answered the Lieutenant, and he kept pointing steadily in its direction, until Servadac also distinctly saw the bright speck in the distance.

It increased in clearness in the gathering shades of evening.

"Can it be a ship?" asked the Captain.

"If so, it must be in flames ; otherwise we should not be able to see it so far off," replied Procope.

"It does not move," said Servadac ; "and unless I am deceived, I can hear a kind of reverberation in the air."

For some seconds the two men stood straining eyes and ears in rapt attention.

Suddenly an idea struck Servadac's mind.

"The volcano!" he cried ; "may it not be the volcano that we saw, whilst we were on board the *Dobryna*?"

The Lieutenant agreed that it was very probable.

"Heaven be praised!" ejaculated the Captain, and he went on in the tones of a keen excitement : "Nature has provided us with our winter-quarters ; the stream of burning lava that is flowing there is the gift of a bounteous Providence ; it will provide us all the warmth we need. No time to lose ! To-morrow, my dear Procope, to-morrow we will explore it all ; no doubt the life, the heat we want

is reserved for us in the heart and bowels of our own Gallia ! ”

Whilst the Captain was indulging in his expressions of enthusiasm, Procope was endeavouring to collect his thoughts. Distinctly he remembered the long promontory which had barred the *Dobryna's* progress while coasting the southern confines of the sea, and which had obliged her to ascend northwards as far as the former latitude of Oran ; he remembered also that at the extremity of the promontory there was a rocky headland crowned with smoke ; and now he was convinced that he was right in identifying the position, and in believing that the smoke had given place to an eruption of flame.

When Servadac gave him a chance of speaking, he said :
“ The more I consider it, Captain, the more I am satisfied that your conjecture is correct. Beyond a doubt, what we see is the volcano, and to-morrow we will not fail to visit it.”

On returning to the gourbi, they communicated their discovery to Count Timascheff only, deeming any further publication of it to be premature. The Count at once placed his yacht at their disposal, and expressed his intention of accompanying them.

“ The yacht, I think,” said Procope, “ had better remain where she is ; the weather is beautifully calm, and the steam-launch will answer our purpose better ; at any rate, it will convey us much closer to shore than the schooner.”

The Count replied that the Lieutenant was by all means to use his own discretion, and they all retired for the night.

Like many other modern pleasure-yachts, the *Dobryna*, in addition to her four-oar, was fitted with a fast-going little steam-launch, its screw being propelled, on the Oriolle system, by means of a boiler, small but very effective. Early next morning, this handy little craft was sufficiently freighted with coal (of which there was still about ten tons on board the *Dobryna*), and manned by nobody except the Captain, the Count, and the Lieutenant, left the harbour

of the Shelif, much to the bewilderment of Ben Zoof, who had not yet been admitted into the secret. The orderly, however, consoled himself with the reflection that he had been temporarily invested with the full powers of Governor-General, an office of which he was not a little proud.

The eighteen miles between the island and the headland were made in something less than three hours. The volcanic eruption was manifestly very considerable, the entire summit of the promontory being enveloped in flames. To produce so large a combustion either the oxygen of Gallia's atmosphere had been brought into contact with the explosive gases contained beneath her soil, or perhaps, still more probably, the volcano, like those in the moon, was fed by an internal supply of oxygen of her own.

It took more than half an hour to settle on a suitable landing-place. At length, a small semi-circular creek was discovered among the rocks, which appeared advantageous, because, if circumstances should so require, it would form a safe anchorage for both the *Dobryna* and the *Hansa*.

The launch securely moored, the passengers landed on the side of the promontory opposite to that on which a torrent of burning lava was descending to the sea. With much satisfaction they experienced, as they approached the mountain, a sensible difference in the temperature, and their spirits could not do otherwise than rise at the prospect of having their hopes confirmed, that a deliverance from the threatened calamity had so opportunely been found. On they went, up the steep acclivity, scrambling over its rugged projections, scaling the irregularities of its gigantic strata, bounding from point to point with the agility of chamois, but never alighting on anything except the accumulation of the same hexagonal prisms with which they had now become so familiar.

Their exertions were happily rewarded. Behind a huge pyramidal rock they found a hole in the mountain-side, like the mouth of a great tunnel. Climbing up to this orifice, which was more than sixty feet above the level of the sea,

they ascertained that it opened into a long dark gallery. They entered and groped their way cautiously along the sides. A continuous rumbling, that increased as they advanced, made them aware that they must be approaching the central funnel of the volcano ; their only fear was lest some insuperable wall of rock should suddenly bar their further progress.

Servadac was some distance ahead.

"Come on !" he cried cheerily, his voice ringing through the darkness, "come on ! Our fire is lighted ! no stint of fuel ! Nature provides that ! Let us make haste and warm ourselves !"

Inspired by his confidence, the Count and the Lieutenant advanced bravely along the unseen and winding path. The temperature was now at least fifteen degrees above zero, and the walls of the gallery were beginning to feel quite warm to the touch, an indication, not to be overlooked, that the substance of which the rock was composed was metallic in its nature, and capable of conducting heat.

"Follow me !" shouted Servadac again ; "we shall soon find a regular stove !"

Onwards they made their way, until at last a sharp turn brought them into a sudden flood of light. The tunnel had opened into a vast cavern, and the gloom was exchanged for an illumination that was perfectly dazzling. Although the temperature was high, it was not in any way intolerable.

One glance was sufficient to satisfy the explorers that the grateful light and heat of this huge excavation were to be attributed to a torrent of lava that was rolling downwards to the sea, completely subtending the aperture of the cave. Not inaptly might the scene be compared to the celebrated Grotto of the Winds at the rear of the central fall of Niagara, only with the exception that here, instead of a curtain of rushing water, it was a curtain of roaring flame that hung before the cavern's mouth.

"Heaven be praised !" cried Servadac, with glad emotion ; "here is all that we hoped for, and more besides !"

CHAPTER XXI

WINTER-QUARTERS

THE habitation that had now revealed itself, well lighted and thoroughly warm, was indeed marvellous. Not only would it afford ample accommodation for Hector Servadac and "his subjects," as Ben Zoof delighted to call them, but it would provide shelter for the two horses, and for a considerable number of domestic animals.

This enormous cavern was neither more nor less than the common junction of nearly twenty tunnels (similar to that which had been traversed by the explorers), forming ramifications in the solid rock, and the pores, as it were, by which the internal heat exuded from the heart of the mountain. Here, as long as the volcano retained its activity, every living creature on the new asteroid might brave the most rigorous of climates ; and as Count Timascheff justly remarked, since it was the only burning mountain they had sighted, it was most probably the sole outlet for Gallia's subterranean fires, and consequently the eruption would continue unchanged for ages to come.

But not a day, not an hour, was to be lost now. The steam-launch returned to Gourbi Island, and preparations were forthwith taken in hand for conveying man and beast, corn and fodder, across to the volcanic headland. Loud and hearty were the acclamations of the little colony, especially of the Spaniards, and great was the relief of Nina, when Servadac announced to them the discovery of their future domicile ; and with requickened energies they laboured hard at the packing, anxious to reach their genial winter-quarters without delay.

For three successive days the *Dobryna*, laden to her very gunwale, made a transit to and fro. Ben Zoof was left upon the island to superintend the stowage of the freight, whilst Servadac found abundant occupation in overlooking its disposal within the recesses of the mountain.

First of all, the large store of corn and fodder, the produce of the recent harvest, was landed and deposited in one of the vaults ; then, on the 15th, about fifty head of live cattle—bullocks, cows, sheep, and pigs—were conveyed to their rocky stalls. These were saved for the sake of preserving the several breeds, the bulk of the island cattle being slaughtered, as the extreme severity of the climate insured all meat remaining fresh for almost an indefinite period. The winter which they were expecting would probably be of unprecedented length ; it was quite likely that it would exceed the six months' duration by which many arctic explorers have been tried ; but the population of Gallia had no anxiety in the matter of provisions—their stock was far more than adequate ; while as for drink, as long as they were satisfied with pure water, a frozen sea would afford them an inexhaustible reservoir.

The need for haste in forwarding their preparations became more and more manifest ; the sea threatened to be unnavigable very soon, as ice was already forming which the noonday sun was unable to melt. And if haste were necessary, so also were care, ingenuity, and forethought. It was indispensable that the space at their command should be properly utilised, and yet that the several portions of the store should all be readily accessible.

On further investigation an unexpected number of galleries was discovered, so that, in fact, the interior of the mountain was like a vast bee-hive perforated with innumerable cells ; and in compliment to the little Italian it was unanimously voted by the colony that their new home should be called "Nina's Hive."

The first care of Captain Servadac was to ascertain how he could make the best possible use of the heat which nature had provided for them so opportunely and with so lavish a hand. By opening fresh vents in the solid rock (which by the action of the heat was here capable of fissure) the stream of burning lava was diverted into several new channels, where it could be available for daily

use ; and thus Mochel, the *Dobryna's* cook, was furnished with an admirable kitchen, provided with a permanent stove, where he was duly installed with all his culinary apparatus.

"What a saving of expense it would be," exclaimed Ben Zoof, "if every household could be furnished with its own private volcano !"

The large cavern at the general junction of the galleries was fitted up as a drawing-room, and arranged with all the best furniture both of the gourbi and of the cabin of the *Dobryna*. Hither was also brought the schooner's library, containing a good variety of French and Russian books ; lamps were suspended over the different tables ; and the walls of the apartment were tapestried with the sails and adorned with the flags belonging to the yacht. The curtain of fire extending over the opening of the cavern provided it, as already stated, with light and heat.

The torrent of lava fell into a small rock-bound basin that had no apparent communication with the sea, and was evidently the aperture of a deep abyss, of which the waters, heated by the descent of the eruptive matter, would no doubt retain their liquid condition long after the Gallian Sea had become a sheet of ice.

A small excavation to the left of the common hall was allotted for the special use of Servadac and the Count ; another on the right was appropriated to the Lieutenant and Ben Zoof ; whilst a third recess, immediately at the back, made a convenient little chamber for Nina. The Spaniards and the Russian sailors took up their sleeping-quarters in the adjacent galleries, and found the temperature quite comfortable.

Such were the internal arrangements of Nina's Hive, the refuge where the little colony were full of hope that they would be able to brave the rigours of the stern winter-time that lay before them—a winter-time during which Gallia might possibly be projected even to the orbit of Jupiter, where the temperature would not exceed one

twenty-fifth of the normal winter temperature of the earth.

The only discontented spirit was Isaac Hakkabut. Throughout all the preparations which roused even the Spaniards to activity, the Jew, still incredulous and deaf to every representation of the true state of things, insisted upon remaining in the creek at Gourbi Island ; nothing could induce him to leave his tartan, where, like a miser, he would keep guard over his precious cargo, ever grumbling and growling, but with his weather-eye open in the hope of catching sight of some passing sail. It must be owned that the whole party were far from sorry to be relieved of his presence ; his uncomely figure and repulsive countenance was a perpetual bugbear. He had given out in plain terms that he did not intend to part with any of his property, except for current money, and Servadac, equally resolute, had strictly forbidden any purchases to be made, hoping to wear out the rascal's obstinacy.

Hakkabut persistently refused to credit the real situation ; he could not absolutely deny that some portions of the terrestrial globe had undergone a certain degree of modification, but nothing could bring him to believe that he was not, sooner or later, to resume his old line of business in the Mediterranean. With his wonted distrust of all with whom he came in contact, he regarded every argument that was urged upon him only as evidence of a plot that had been devised to deprive him of his goods. Repudiating, as he did utterly, the hypothesis that a fragment had become detached from the earth, he scanned the horizon for hours together with an old telescope, the case of which had been patched up till it looked like a rusty stove-pipe, hoping to descry a passing trader with which he might effect some bartering upon advantageous terms.

At first he professed to regard the proposed removal into winter-quarters as an attempt to impose upon his credulity ; but the frequent voyages made by the *Dobryna* to the south, and the repeated consignments of corn and cattle, soon served to make him aware that Captain Servadac and his

companions were really contemplating a departure from Gourbi Island.

The movement set him thinking. What, he began to ask himself—what if all that was told him was true? What if this sea was no longer the Mediterranean? What if he should never again behold his German fatherland? What if his marts for business were gone for ever? A vague idea of ruin began to take possession of his mind: he must yield to necessity; he must do the best he could. As the result of his cogitations, he occasionally left his tartan and made a visit to the shore. At length he endeavoured to mingle with the busy group, who were hurrying on their preparations; but his advances were only met by jeers and scorn, and, ridiculed by all the rest, he was fain to turn his attention to Ben Zoof, to whom he offered a few pinches of tobacco.

“No, old Zebulon,” said Ben Zoof, steadily refusing the gift, “it is against orders to take anything from you. Keep your cargo to yourself; eat and drink it all if you can; we are not to touch it.”

Finding the subordinates incorruptible, Isaac determined to go to the fountain-head. He addressed himself to Servadac, and begged him to tell him the whole truth, piteously adding that surely it was unworthy of a French officer to deceive a poor old man like himself.

“Tell you the truth, man!” cried Servadac. “Confound it, I have told you the truth twenty times. Once for all, I tell you now, you have left yourself barely time enough to make your escape to yonder mountain.”

“God and Mahomet have mercy on me!” muttered the Jew, whose creed frequently assumed a very ambiguous character.

“I will tell you what,” continued the Captain—“you shall have a few men to work the *Hansa* across, if you like.”

“But I want to go to Algiers,” whimpered Hakkabut.

“How often am I to tell you that Algiers is no longer in existence? Only say yes or no—are you coming with us into winter-quarters?”

“ God of Israel ! what is to become of all my property ? ”

“ But, mind you,” continued the Captain, not heeding the interruption, “ if you do not choose voluntarily to come with us, I shall have the *Hansa*, by my orders, removed to a place of safety. I am not going to let your cursed obstinacy incur the risk of losing your cargo altogether.”

“ Merciful heaven ! I shall be ruined ! ” moaned Isaac, in despair.

“ You are going the right way to ruin yourself, and it would serve you right to leave you to your own devices. But be off ! I have no more to say.”

And, turning contemptuously on his heel, Servadac left the old man vociferating bitterly, and with uplifted hands protesting vehemently against the rapacity of the Gentiles.

By the 20th all preliminary arrangements were complete, and everything ready for a final departure from the island. The thermometer stood on an average at 8° below zero, and the water in the cistern was completely frozen. It was determined, therefore, for the colony to embark on the following day, and take up their residence in Nina's Hive.

A final consultation was held about the *Hansa*. Lieutenant Procope pronounced his decided conviction that it would be impossible for the tartan to resist the pressure of the ice in the harbour of the Shelif, and that there would be far more safety in the proximity of the volcano. It was agreed on all hands that the vessel must be shifted ; and accordingly orders were given, four Russian sailors were sent on board, and only a few minutes elapsed after the *Dobryna* had weighed anchor, before the great lateen sail of the tartan was unfurled, and the “ shop-ship,” as Ben Zoof delighted to call it, was also on her way to the southward.

Long and loud were the lamentations of the Jew. He kept exclaiming that he had given no orders, that he was being moved against his will, that he had asked for no

assistance, and needed none ; but it required no very keen discrimination to observe that all along there was a lurking gleam of satisfaction in his little grey eyes, and when, a few hours later, he found himself securely anchored, and his property in a place of safety, he quite chuckled with glee.

" God of Israel ! " he said in an undertone, " they have made no charge ; the idiots have piloted me here for nothing."

For nothing ! His whole nature exulted in the consciousness that he was enjoying a service that had been rendered gratuitously.

Destitute of human inhabitants, Gourbi Island was now left to the tenancy of such birds and beasts as had escaped the recent promiscuous slaughter. Birds, indeed, that had migrated in search of warmer shores, had returned, proving that this fragment of the French colony was the only shred of land that could yield them any sustenance ; but their life must necessarily be short. It was utterly impossible that they could survive the cold that would soon ensue.

The colony took possession of their new abode with but few formalities. Everyone, however, approved of all the internal arrangements of Nina's Hive, and were profuse in their expressions of satisfaction at finding themselves located in such comfortable quarters. The only malcontent was Hakkabut ; he had no share in the general enthusiasm, refused even to enter or inspect any of the galleries, and insisted on remaining on board his tartan.

" He is afraid," said Ben Zoof, " that he will have to pay for his lodgings. But wait a bit ; we shall see how he stands the cold out there ; the frost, no doubt, will drive the old fox out of his hole."

Towards evening the pots were set boiling, and a bountiful supper, to which all were invited, was spread in the central hall. The stores of the *Dobryna* contained some excellent wine, some of which was broached to do honour to the occasion. The health of the Governor-General was drunk, as well as the toast " Success to his

council," to which Ben Zoof was called upon to return thanks. The entertainment passed off merrily. The Spaniards were in the best of spirits ; one of them played the guitar, another the castanets, and the rest joined in a ringing chorus. Ben Zoof contributed the famous Zouave refrain, well known throughout the French army, but rarely performed in finer style than by this *virtuoso* :

" Misti goth dar dar tire lyre !
Flic ! floc ! flac ! lirette, lira !
Far la rira,
Tour tala rire,
Tour la Ribaud,
Ricandeau,
Sans repos, répit, répit repos, ris pot, ripette !
Si vous attrapez mon refrain,
Fameux vous êtes."

The concert was succeeded by a ball, unquestionably the first that had ever taken place in Gallia. The Russian sailors exhibited some of their national dances, which gained considerable applause, even although they followed upon the marvellous fandangos of the Spaniards. Ben Zoof, in his turn, danced a *pas seul* (often performed in the Elysée Montmartre) with an elegance and vigour that earned many compliments from Negrete.

It was nine o'clock before the festivities came to an end, and by that time the company, heated by the high temperature of the hall, and by their own exertions, felt the want of a little fresh air. Accordingly, the greater portion of the party, escorted by Ben Zoof, made their way into one of the adjacent galleries that led to the shore. Servadac, with the Count and Lieutenant, did not follow immediately, but shortly afterwards they proceeded to join them, when on their way they were startled by loud cries from those in advance.

Their first impression was that they were cries of distress, and they were greatly relieved to find that they were shouts of delight, which the dryness and purity of the atmosphere caused to re-echo like a volley of musketry.

Reaching the mouth of the gallery, they found the entire group pointing with eager interest to the sky.

"Well, Ben Zoof," asked the Captain, "what's the matter now?"

"Oh, your Excellency," ejaculated the orderly, "look there! look there! The moon! the moon's come back!"

And, sure enough, what was apparently the moon was rising above the mists of evening.

CHAPTER XXII

A FROZEN OCEAN

The moon! She had disappeared for weeks; was she now returning? Had she been faithless to the earth? and had she now approached to be a satellite of the new-born world?

"Impossible!" said Lieutenant Procope; "the earth is millions and millions of leagues away, and it is not probable that the moon has ceased to revolve about her."

"Why not?" remonstrated Servadac. "It would not be more strange than the other phenomena which we have lately witnessed. Why should not the moon have fallen within the limits of Gallia's attraction, and become her satellite?"

"Upon that supposition," put in the Count, "I should think that it would be altogether unlikely that three months would elapse without our seeing her."

"Quite incredible!" continued Procope. "And there is another thing which totally disproves the Captain's hypothesis; the magnitude of Gallia is far too insignificant for her power of attraction to carry off the moon."

"But," persisted Servadac, "why should not the same convulsion that tore us away from the earth have torn away the moon as well? After wandering about as she would for a while in the solar regions, I do not see why she should not have attached herself to us."

The Lieutenant repeated his conviction that it was not likely.

"But why not?" again asked Servadac, impetuously.

"Because, I tell you, the mass of Gallia is so inferior to that of the moon, that Gallia would become the moon's satellite; the moon could not possibly become hers."

"Assuming, however," continued Servadac, "such to be the case——"

"I am afraid," said the Lieutenant, interrupting him, "that I cannot assume anything of the sort even for a moment."

Servadac smiled good-humouredly.

"I confess you seem to have the best of the argument, and if Gallia had become a satellite of the moon, it would not have taken three months to catch sight of her. I suppose you are right."

While this discussion had been going on, the satellite, or whatever it might be, had been rising steadily above the horizon, and had reached a position favourable for observation. Telescopes were brought, and it was very soon ascertained, beyond a question, that the new luminary was not the well-known Phœbe of terrestrial nights; it had no feature in common with the moon. Although it was apparently much nearer to Gallia than the moon to the earth, its superficies was hardly one-tenth as large, and so feebly did it reflect the light of the remote sun, that it scarcely emitted radiance enough to extinguish the dim lustre of stars of the eighth magnitude. Like the sun, it had risen in the west, and was now at its full. To mistake its identity with the moon was absolutely impossible; not even Servadac could discover a trace of the seas, chasms, craters, and mountains which have been so minutely delineated in lunar charts; and it could not be denied that any transient hope that had been excited as to their once again being about to enjoy the peaceful smiles of "the queen of night" must all be resigned.

Count Timascheff finally suggested, though somewhat

doubtfully, the question of the probability that Gallia, in her course across the zone of the minor planets, had carried off one of them ; but whether it was one of the 169 asteroids already included in the astronomical catalogues, or one previously unknown, he did not presume to determine. The idea to a certain extent was plausible, inasmuch as it has been ascertained that several of the telescopic planets are of such small dimensions that a good walker might make a circuit of them in four and twenty hours ; consequently Gallia, being of superior volume, might be supposed capable of exercising a power of attraction upon any of these miniature microcosms.

The first night in Nina's Hive passed without special incident ; and next morning a regular scheme of life was definitely laid down. " My lord Governor " (as Ben Zoof, until he was peremptorily forbidden, delighted to call Servadac) had a wholesome dread of idleness and its consequences, and insisted upon each member of the party undertaking some special duty to fulfil. There was plenty to do. The domestic animals required a great deal of attention ; a supply of food had to be secured and preserved ; fishing had to be carried on while the condition of the sea would allow it ; and in several places the galleries had to be further excavated to render them more available for use. Occupation, then, need never be wanting, and the daily round of labour could go on in orderly routine.

A perfect concord ruled the little colony. The Russians and Spaniards amalgamated well, and both did their best to pick up various scraps of French, which was considered the official language of the place. Servadac himself undertook the tuition of Pablo and Nina, Ben Zoof being their companion in play-hours, when he entertained them with enchanting stories in the best Parisian French, about " a lovely city at the foot of a mountain," where he almost promised one day to take them.

The end of March came, but the cold was not intense to such a degree as to confine any of the party to the

interior of their resort ; several excursions were made along the shore, and for a radius of three or four miles the adjacent district was carefully explored. Investigation, however, always ended in the same result ; turn their course in whatever direction they would, they found that the country retained everywhere its desert character, rocky, barren, and without a trace of vegetation. Here and there a slight layer of snow or a thin coating of ice arising from atmospheric condensation indicated the existence of superficial moisture, but it would require a period indefinitely long, exceeding human reckoning, before that moisture could collect into a stream and roll downwards over the stony strata to the sea. It seemed at present out of their power to determine whether the land upon which they were so happily settled was an island or a continent, and till the cold was abated they feared to undertake any lengthened expedition to ascertain the actual extent of the strange concrete of metallic crystallization.

By ascending one day to the summit of the volcano, Captain Servadac and the Count succeeded in getting a general idea of the aspect of the country. The mountain itself was an enormous block rising symmetrically to a height of nearly 3,000 feet above the level of the sea, in the form of a truncated cone, of which the topmost section was crowned by a wreath of smoke issuing continuously from the mouth of a narrow crater.

Under the old condition of terrestrial things, the ascent of this steep acclivity would have been attended with much fatigue, but as the effect of the altered condition of the law of gravity, the travellers performed perpetual prodigies in the way of agility, and in little over an hour reached the edge of the crater, without more sense of exertion than if they had traversed a couple of miles on level ground. Gallia had its drawbacks, but it had some compensating advantages.

Telescopes in hand, the explorers from the summit scanned the surrounding view. Their anticipations had

already realised what they saw. Just as they expected, on the north, east, and west lay the Gallian Sea, smooth and motionless as a sheet of glass, the cold having, as it were, congealed the atmosphere so that there was not a breath of wind. Towards the south there seemed no limit to the land, and the volcano formed the apex of a triangle, of which the base was beyond the reach of vision. Viewed even from this height, whence distance would do much to soften the general asperity, the surface nevertheless seemed to be bristling with its myriads of hexagonal lamellæ, and to present difficulties which, to an ordinary pedestrian, would be insurmountable.

“O for some wings, or else a balloon !” cried Servadac, as he gazed around him ; and then, looking down to the rock upon which they were standing, he added, “We seem to have been transplanted to a soil strange enough in its chemical character to bewilder the *savants* at a museum.”

“And do you observe, Captain,” asked the Count, “how the convexity of our little world curtails our view ? See how circumscribed is the horizon !”

Servadac replied that he had noticed the same circumstance from the top of the cliff of Gourbi Island.

“Yes,” said the Count ; “it becomes more and more obvious that ours is a very tiny world, and that Gourbi Island is the sole productive spot upon its surface. We have had a short summer, and who knows whether we are not entering upon a winter that may last for years, perhaps for centuries ?”

“But we must not mind, Count,” said Servadac, smiling. “We have agreed, you know, that, come what may, we are to be philosophers.”

“Ay, true, my friend,” rejoined the Count ; “we must be philosophers and something more ; we must be grateful to the good Protector who has hitherto befriended us, and we must trust His mercy to the end.”

For a few moments they both stood in silence, and

contemplated land and sea ; then, having given a last glance over the dreary panorama, they prepared to wend their way down the mountain. Before, however, they commenced their descent, they resolved to make a closer examination of the crater. They were particularly struck by what seemed to them almost the mysterious calmness with which the eruption was effected. There was none of the wild disorder and deafening tumult that usually accompany the discharge of volcanic matter, but the heated lava, rising with a uniform gentleness, quietly overran the limits of the crater, like the flow of water from the bosom of a peaceful lake. Instead of a boiler exposed to the action of an angry fire, the crater rather resembled a brimming basin, of which the contents were noiselessly escaping. Nor were there any igneous stones or red-hot cinders mingled with the smoke that crowned the summit ; a circumstance that quite accorded with the absence of the pumice-stones, obsidians, and other minerals of volcanic origin with which the base of a burning mountain is generally strewn.

Captain Servadac was of opinion that this peculiarity augured favourably for the continuance of the eruption. Extreme violence in physical as well as in moral nature is never of long duration. The most terrible storms, like the most violent fits of passion, are not lasting ; but here the calm flow of the liquid fire appeared to be supplied from a source that was inexhaustible, in the same way as the waters of Niagara, gliding on steadily to their final plunge, would defy all effort to arrest their course.

Before the evening of this day closed in, a most important change was effected in the condition of the Gallian Sea by the intervention of human agency. Notwithstanding the increasing cold, the sea, unruffled as it was by a breath of wind, still retained its liquid state. It is an established fact that water, under this condition of absolute stillness, will remain uncongealed at a temperature several degrees below zero, whilst experiment, at the same time, shows that a

very slight shock will often be sufficient to convert it into solid ice.

It had occurred to Servadac that if some communication could be opened with Gourbi Island, there would be a fine scope for hunting expeditions. Having this ultimate object in view, he assembled his little colony upon a projecting rock at the extremity of the promontory, and having called Nina and Pablo out to him in front, he said :

“ Now, Nina, do you think you could throw something into the sea ? ”

“ I think I could,” replied the child, “ but I am sure that Pablo would throw it a great deal farther than I can.”

“ Never mind, you shall try first.”

Putting a fragment of ice into Nina’s hand, he addressed himself to Pablo :

“ Look out, Pablo ; you shall see what a nice little fairy Nina is ! Throw, Nina, throw, as hard as you can.”

Nina balanced the piece of ice two or three times in her hand, and threw it forward with all her strength.

A sudden thrill seemed to vibrate across the motionless waters to the distant horizon, and the Gallian Sea had become a solid sheet of ice !

CHAPTER XXIII

A CARRIER-PIGEON

When, three hours after sunset, on the 23rd of March, the Gallian moon rose upon the western horizon, it was observed that she had entered upon her last quarter. She had taken only four days to pass from syzygy to quadrature, and it was consequently evident that she would be visible for little more than a week at a time, and that her lunation would be accomplished within sixteen days. The lunar months, like the solar days, had been diminished by one half. Three days later the moon was in conjunction with the sun, and was consequently lost to view ; Ben

Zoof, as the first observer of the satellite, was extremely interested in its movements, and wondered whether it would ever re-appear.

On the 26th, under an atmosphere perfectly clear and dry, the thermometer fell to 12° C. below zero. Of the present distance of Gallia from the sun, and the number of leagues she had traversed since the receipt of the last mysterious document, there were no means of judging ; the extent of diminution in the apparent disc of the sun did not afford sufficient basis even for an approximate calculation ; and Captain Servadac was perpetually regretting that they could receive no further tidings from the anonymous correspondent, whom he persisted in regarding as a fellow-countryman.

The solidity of the ice was perfect ; the utter stillness of the air at the time when the final congelation of the waters had taken place had resulted in the formation of a surface that for smoothness would rival a skating-rink ; without a crack or flaw it extended far beyond the range of vision.

The contrast to the ordinary aspect of polar seas was very remarkable. There, the ice-fields are an agglomeration of hummocks and icebergs, massed in wild confusion, often towering higher than the masts of the largest whalers, and from the instability of their foundations liable to an instantaneous loss of equilibrium ; a breath of wind, a slight modification of the temperature, not unfrequently serving to bring about a series of changes outrivalling the most elaborate transformation scenes of a pantomime. Here, on the contrary, the vast white plain was level as the desert of Sahara or the Russian steppes ; the waters of the Gallian Sea were imprisoned beneath the solid sheet, which became continually stouter in the increasing cold.

Accustomed to the uneven crystallizations of their own frozen seas, the Russians could not be otherwise than delighted with the polished surface that afforded them such excellent opportunity for enjoying their favourite pastime

of skating. A supply of skates, found hidden away amongst the *Dobryna's* stores, was speedily brought into use. The Russians undertook the instruction of the Spaniards, and at the end of a few days, during which the temperature was only endurable through the absence of wind, there was not a Gallian who could not skate tolerably well, while many of them could describe figures involving the most complicated curves. Nina and Pablo earned loud applause by their rapid proficiency ; Captain Servadac, an adept in athletics, almost outvied his instructor, the Count ; and Ben Zoof, who had upon some rare occasions skated upon the Lake of Montmartre (in his eyes, of course, a sea), performed prodigies in the art.

This exercise was not only healthy in itself, but it was acknowledged that, in case of necessity, it might become a very useful means of locomotion. As Captain Servadac remarked, it was almost a substitute for railways, and as if to illustrate this proposition, Lieutenant Procope, perhaps the greatest expert in the party, accomplished the twenty miles to Gourbi Island and back in considerably less than four hours.

The temperature, meanwhile, continued to decrease, and the average reading of the thermometer was about 16° C. below zero ; the light also diminished in proportion, and all objects appeared to be enveloped in a half-defined shadow, as though the sun were undergoing a perpetual eclipse. It was not surprising that the effect of this continuously overhanging gloom should be to induce a frequent depression of spirits amongst the majority of the little population, exiles as they were from their mother earth, and not unlikely, as it seemed, to be swept far away into the regions of another planetary sphere. Probably Count Timascheff, Captain Servadac, and Lieutenant Procope were the only members of the community who could bring any scientific judgment to bear upon the uncertainty that was before them, but a general sense of the strangeness of their situation could not fail at times to weigh heavily

upon the minds of all. Under these circumstances it was very necessary to counteract the tendency to despond by continual diversion ; and the recreation of skating thus opportunely provided, seemed just the thing to arouse the flagging spirits, and to restore a wholesome excitement.

With dogged obstinacy, Isaac Hakkabut refused to take any share either in the labours or the amusements of the colony. In spite of the cold, he had not been seen since the day of his arrival from Gourbi Island. Captain Servadac had strictly forbidden any communication with him ; and the smoke that rose from the cabin chimney of the *Hansa* was the sole indication of the proprietor being still on board. There was nothing to prevent him, if he chose, from partaking gratuitously of the volcanic light and heat which were being enjoyed by all besides ; but rather than abandon his close and personal oversight of his precious cargo, he preferred to sacrifice his own slender stock of fuel.

Both the schooner and the tartan had been carefully moored in the way that seemed to promise best for withstanding the rigour of the winter. After seeing the vessels made secure in the frozen creek, Lieutenant Procope, following the example of many Arctic explorers, had the precaution to have the ice bevelled away from the keels, so that there should be no risk of the ships' sides being crushed by the increasing pressure ; he hoped that they would follow any rise in the level of the ice-field, and when the thaw should come, that they would easily regain their proper water-line.

On his last visit to Gourbi Island, the Lieutenant had ascertained that north, east, and west, far as the eye could reach, the Gallian Sea had become one uniform sheet of ice. One spot alone refused to freeze : this was the pool immediately below the central cavern, the receptacle for the stream of burning lava. It was entirely enclosed by rocks, and if ever a few icicles were formed there by the action of the cold, they were very soon melted by the fiery shower. Hissing and spluttering as the hot lava came in

contact with it, the water was in a continual state of ebullition, and the fish that abounded in its depths defied the angler's craft ; they were, as Ben Zoof remarked, " too much boiled to bite."

At the beginning of April the weather changed. The sky became overcast, but there was no rise in the temperature. Unlike the polar winters of the earth, which ordinarily are affected by atmospheric influence, and liable to slight intermissions of their severity at various shiftings of the wind, Gallia's winter was caused by her immense distance from the source of all light and heat, and the cold was consequently destined to go on steadily increasing until it reached the limit ascertained by Fourier to be the normal temperature of the realms of space.

With the over-clouding of the heavens there arose a violent tempest ; but although the wind raged with an almost inconceivable fury, it was unaccompanied by either snow or rain. Its effect upon the burning curtain that covered the aperture of the central hall was very remarkable. So far from there being any likelihood of the fire being extinguished by the vehemence of the current of air, the hurricane seemed rather to act as a ventilator, which fanned the flame into greater activity, and the utmost care was necessary to avoid being burnt by the fragments of lava that were drifted into the interior of the grotto. More than once the curtain itself was rifted entirely asunder, but only to close up again immediately after allowing a momentary draught of cold air to penetrate the hall in a way that was refreshing and rather advantageous than otherwise.

On the 4th of April, after an absence of about four days, the new satellite, to Ben Zoof's great satisfaction, made its re-appearance in a crescent form, a circumstance that seemed to justify the anticipation that henceforward it would continue to make a periodic revolution every fortnight.

The crust of ice and snow was far too stout for the beaks of the strongest birds to penetrate, and accordingly

large swarms had left the island, and, following the human population, had taken refuge on the volcanic promontory ; not that there the barren shore had anything in the way of nourishment to offer them, but their instinct impelled them to haunt now the very habitations which formerly they would have shunned. Scraps of food were thrown to them from the galleries ; these were speedily devoured, but were altogether inadequate in quantity to meet the demand. At length, emboldened by hunger, several hundred birds ventured through the tunnel, and took up their quarters actually in Nina's Hive. Congregating in the large hall, the half-famished creatures did not hesitate to snatch bread, meat, or food of any description from the hands of the residents as they sat at table, and soon became such an intolerable nuisance that it formed one of the daily diversions to hunt them down ; but although they were vigorously attacked by stones and sticks, and even occasionally by shot, it was with some difficulty that their number could be sensibly reduced.

First and foremost in these daily raids upon the birds was Ben Zoof. He yelled and shouted, and swore at the intruders much as he had done upon the island, and by the help of his companions succeeded in doing a considerable amount of destruction. For days the table was supplied with an abundance of woodcocks, wild ducks, snipes, and partridges ; and although the birds had been knocked down at random, they could hardly have been more choice as delicacies if they had been selected with especial regard to their edible qualities.

By a systematic course of warfare the bulk of the birds were all expelled, with the exception of about a hundred, which began to build in the crevices of the rocks. These were left in quiet possession of their quarters, as not only was it deemed advisable to perpetuate the various breeds, but it was found that these birds acted as a kind of police, never failing either to chase away or to kill any others of their species who infringed upon what they appeared to

regard as their own special privilege in intruding within the limits of their domain.

On the 15th loud cries were suddenly heard issuing from the mouth of the principal gallery.

"Help, help ! I shall be killed !"

Pablo on a moment recognised the voice as Nina's. Outrunning even Ben Zoof he hurried to the assistance of his little playmate, and discovered that she was being attacked by half a dozen great sea-gulls, and only after receiving some severe blows from their beaks could he succeed by means of a stout cudgel in driving them away.

"Tell me, Nina, what is this ?" he asked as soon as the tumult had subsided.

The child pointed to a bird which she was caressing tenderly in her bosom.

"A pigeon !" exclaimed Ben Zoof, who had reached the scene of commotion, adding :

"A carrier-pigeon ! And by all the saints of Montmartre, there is a little bag attached to its neck !"

He took the bird, and rushing into the hall placed it in Servadac's hands.

"Another message, no doubt," cried the Captain, "from our unknown friend. Let us hope that this time he has given us his name and address."

All crowded round, eager to hear the news. In the struggle with the sea-gulls the bag had been partially torn open, but it was found to contain the following despatch :

"Gallia !

Chemin parcouru du 1^{er} Mars au 1^{er} Avril : 39,000,000 l. !

Distance du soleil : 110,000,000 l. !

Capté Nérina en passant.

Vivres vont manquer et"

The rest of the document had been so damaged by the beaks of the gulls that it was illegible. Servadac was wild with vexation. He felt more and more convinced that the writer was a Frenchman, and that the last line indicated that he was in distress from scarcity of food. The very

thought of a fellow-countryman in peril of starvation drove him well-nigh to distraction, and it was in vain that search was made everywhere near the scene of conflict in hopes of finding the missing scrap that might bear a signature or address.

Suddenly little Nina, who had again taken possession of the pigeon, and was hugging it to her breast, said :

“ Look here, Ben Zoof ! ”

And as she spoke she pointed to the left wing of the bird.

The wing bore the faint impress of a postage-stamp, and the one word

“ FORMENTERA.”

CHAPTER XXIV

A SLEDGE-RIDE

Formentera was at once recognised by Servadac and the Count as the name of one of the smallest of the Balearic Islands. It was more than probable that the unknown writer had thence sent out the mysterious documents, and from the message just come to hand by the carrier-pigeon, it appeared all but certain that at the beginning of April, a fortnight back, he had still been there. In one important particular the present communication differed from those that had preceded it : it was written entirely in French, and exhibited none of the ecstatic exclamations in other languages that had been remarkable in the two former papers. The concluding line, with its intimation of failing provisions, amounted almost to an appeal for help. Captain Servadac briefly drew attention to these points, and concluded by saying :

“ My friends, we must, without delay, hasten to the assistance of this unfortunate man.”

“ For my part,” said the Count, “ I am quite ready to accompany you ; it is not unlikely that he is not alone in his distress.”

Lieutenant Procope expressed much surprise.

"We must have passed close to Formentera," he said, "when we explored the site of the Balearic Isles ; this fragment must be very small ; it must be smaller than the remaining splinter of Gibraltar or Ceuta ; otherwise, surely, it would never have escaped our observation."

"However small it may be," replied Servadac, "we must find it. How far off do you suppose it is ?"

"It must be a hundred and twenty leagues away," said the Lieutenant, thoughtfully ; "and I do not quite understand how you would propose to get there."

"Why, on skates of course ; no difficulty in that, I should imagine," answered Servadac, and he appealed to the Count for confirmation of his opinion.

The Count assented, but Procope looked doubtful.

"Your enterprise is generous," he said, "and I should be most unwilling to throw any unnecessary obstacle in the way of its execution ; but, pardon me, if I submit to you a few considerations which to my mind are very important. First of all, the thermometer is already down to 22° below zero, and the keen wind from the south is making the temperature absolutely unendurable ; in the second place, supposing you travel at the rate of twenty leagues a day, you would be exposed for at least six consecutive days ; and thirdly, your expedition will be of small avail unless you convey provisions not only for yourselves, but for those whom you hope to relieve."

"We can carry our own provisions on our backs in knapsacks," interposed Servadac, quickly, unwilling to recognise any difficulty in the way.

"Granted that you can," answered the Lieutenant, quietly ; "but where, on this level ice-field, will you find shelter in your periods of rest ? You must perish with cold ; you will not have the chance of digging out ice-huts like the Esquimaux."

"As to rest," said Servadac, "we shall take none ; we shall keep on our way continuously ; by travelling day

and night without intermission, we shall not be more than three days in reaching Formentera."

"Believe me," persisted the Lieutenant, calmly, "your enthusiasm is carrying you too far; the feat you propose is impossible; but even conceding the possibility of your success in reaching your destination, what service do you imagine that you, half-starved and half-frozen yourself, could render to those who are already perishing by want and exposure? you would only bring them away to die."

The obvious and dispassionate reasoning of the Lieutenant could not fail to impress the minds of those who listened to him; the impracticability of the journey became more and more apparent; unprotected on that drear expanse, any traveller must assuredly succumb to the snow-drifts that were continually being whirled across it. But Hector Servadac, animated by the generous desire of rescuing a suffering fellow-creature, could scarcely be brought within the bounds of common sense. Against his better judgment he was still bent upon the expedition, and Ben Zoof declared himself ready to accompany his master in the event of Count Timascheff hesitating to encounter the peril which the undertaking involved. But the Count entirely repudiated all idea of shrinking from what, quite as much as the Captain, he regarded as a sacred duty, and turning to Lieutenant Procope, told him that unless some better plan could be devised, he was prepared to start off at once and make the attempt to skate across to Formentera. The Lieutenant, who was lost in thought, made no immediate reply.

"I wish we had a sledge," said Ben Zoof.

"I daresay that a sledge of some sort could be contrived," said the Count; "but then we should have no dogs or reindeer to draw it."

"Why not rough-shoe the two horses?"

"They would never be able to endure the cold," objected the Count.

"Never mind," said Servadac, "let us get our sledge and put them to the test. Something must be done !"

"I think," said Lieutenant Procope, breaking his thoughtful silence, "that I can tell you of a sledge already provided for your hand, and I can suggest a motive power surer and swifter than horses."

"What do you mean ?" was the eager inquiry.

"I mean the *Dobryna's* yawl," answered the Lieutenant ; "and I have no doubt that the wind would carry her rapidly along the ice."

The idea seemed admirable. Lieutenant Procope was well aware to what marvellous perfection the Americans had brought their sail-sledges, and had heard how in the vast prairies of the United States they had been known to outvie the speed of an express train, occasionally attaining a rate of more than a hundred miles an hour. The wind was still blowing hard from the south, and assuming that the yawl could be propelled with a velocity of about fifteen or at least twelve leagues an hour, he reckoned that it was quite possible to reach Formentera within twelve hours, that is to say, in a single day between the intervals of sunrise and sunset.

The yawl was about twelve feet long, and capable of holding five or six people. The addition of a couple of iron runners would be all that was requisite to convert it into an excellent sledge, which, if a sail were hoisted, might be deemed certain to make a rapid progress over the smooth surface of the ice. For the protection of the passengers it was proposed to erect a kind of wooden roof lined with strong cloth ; beneath this could be packed a supply of provisions, some warm furs, some cordials, and a portable stove to be heated by spirits of wine.

For the outward journey the wind was as favourable as could be desired ; but it was to be apprehended that, unless the direction of the wind should change, the return would be a matter of some difficulty ; a system of tacking might be carried out to a certain degree, but it was not

likely that the yawl would answer her helm in any way corresponding to what would occur in the open sea. Captain Servadac, however, would not listen to any representation of probable difficulties ; the future, he said, must provide for itself.

The engineer and several of the sailors set vigorously to work, and before the close of the day the yawl was furnished with a pair of stout iron runners, curved upwards in front, and fitted with a metal scull designed to assist in maintaining the directness of her course ; the roof was put on, and beneath it were stored the provisions, the wraps, and the cooking utensils.

A strong desire was expressed by Lieutenant Procope that he should be allowed to accompany Captain Servadac instead of Count Timascheff. It was unadvisable for all three of them to go, as in case of there being several persons to be rescued, the space at their command would be quite inadequate. The Lieutenant urged that he was the most experienced seaman, and as such was best qualified to take command of the sledge and the management of the sails ; and as it was not to be expected that Servadac would resign his intention of going in person to relieve his fellow-countryman, Procope submitted his own wishes to the Count. The Count was himself very anxious to have his share in the philanthropic enterprise, and demurred considerably to the proposal ; he yielded, however, after a time to Servadac's representations that in the event of the expedition proving disastrous, the little colony would need his services alike as Governor and protector, and overcoming his reluctance to be left out of the perilous adventure, was prevailed upon to remain behind for the general good of the community at Nina's Hive.

At sunrise on the following morning, the 16th of April, Captain Servadac and the Lieutenant took their places in the yawl. The thermometer was more than 20° below zero, and it was with deep emotion that their companions beheld them thus embarking upon the vast white plain.

Ben Zoof's heart was too full for words ; Count Timascheff could not forbear pressing his two brave friends to his bosom ; the Spaniards and the Russian sailors crowded round for a farewell shake of the hand, and little Nina, her great eyes flooded with tears, held up her face for a parting kiss. The sad scene was not permitted to be long. The sail was quickly hoisted, and the sledge, just as if it had expanded a huge white wing, was in a little while carried far away beyond the horizon.

Light and unimpeded, the yawl scudded on with incredible speed. Two sails, a brigantine and a jib, were arranged to catch the wind to the greatest advantage, and the travellers estimated that their progress would be little under the rate of twelve leagues an hour. The motion of their novel vehicle was singularly gentle, the oscillation being less than that of an ordinary railway-carriage, while the diminished force of gravity contributed to the swiftness. Except that the clouds of ice-dust raised by the metal runners were an evidence that they had not actually left the level surface of the ice, the Captain and Lieutenant might again and again have imagined that they were being conveyed through the air in a balloon.

Lieutenant Procope, with his head all muffled up for fear of frost-bite, took an occasional peep through an aperture that had been intentionally left in the roof, and by the help of a compass, maintained a proper and straight course for Formentera. Nothing could be more dejected than the aspect of that frozen sea ; not a single living creature relieved the solitude ; both the travellers, Procope from a scientific point of view, Servadac from an æsthetic, were alike impressed by the solemnity of the scene, and when the lengthened shadow of the sail cast upon the ice by the oblique rays of the setting sun had disappeared, and day had given place to night, the two men, drawn together as by an involuntary impulse, mutually held each other's hands in silence.

There had been a new moon on the previous evening ;

but, in the absence of moonlight, the constellations shone with remarkable brilliancy. The new pole-star close upon the horizon was resplendent, and even had Lieutenant Procope been destitute of a compass, he would have had no difficulty in holding his course by the guidance of that alone. However great was the distance that separated Gallia from the sun, it was after all manifestly insignificant in comparison with the remoteness of the nearest of the fixed stars.

Observing that Servadac was completely absorbed in his own thoughts, Lieutenant Procope had leisure to contemplate some of the present perplexing problems, and to ponder over the true astronomical position. The last of the three mysterious documents had represented that Gallia, in conformity with Kepler's second law, had travelled along her orbit during the month of March twenty millions of leagues less than she had done in the previous month ; yet, in the same time, her distance from the sun had nevertheless been increased by thirty-two millions of leagues. She was now, therefore, in the centre of the zone of telescopic planets that revolve between the orbits of Mars and Jupiter, and had captured for herself a satellite which, according to the document, was Nerina, one of the asteroids most recently identified. If thus, then, it was within the power of the unknown writer to estimate with such apparent certainty Gallia's exact position, was it not likely that his mathematical calculations would enable him to arrive at some definite conclusion as to the date at which she would begin again to approach the sun ? Nay, was it not to be expected that he had already estimated, with sufficient approximation to truth, what was to be the true length of the Gallian year ?

So intently had they each separately been following their own train of thought, that daylight re-appeared almost before the travellers were aware of it. On consulting their instruments, they found that they must have travelled close upon a hundred leagues since they started, and they

resolved to slacken their speed. The sails were accordingly taken in a little, and in spite of the intensity of the cold, the explorers ventured out of their shelter, in order that they might reconnoitre the plain, which was apparently as boundless as ever. It was completely desert ; not so much as a single point of rock relieved the bare uniformity of its surface.

"Are we not considerably to the west of Formentera ?" asked Servadac, after examining the chart.

"Most likely," replied Procope. "I have taken the same course as I should have done at sea, and I have kept some distance to windward of the island ; we can bear straight down upon it whenever we like."

"Bear down then, now ; and as quickly as you can."

The yawl was at once put with her head to the north-east, and Captain Servadac, in defiance of the icy blast, remained standing at the bow, his gaze fixed on the horizon.

All at once his eye brightened.

"Look, look !" he exclaimed, pointing to a faint outline that broke the monotony of the circle that divided the plain from the sky.

In an instant the Lieutenant had seized his telescope.

"I see what you mean," said he ; "it is a pylone that has been used for some geodesic survey."

The next moment the sail was filled, and the yawl was bearing down upon the object with inconceivable swiftness, both Captain Servadac and the Lieutenant too excited to utter a word. Mile after mile the distance rapidly grew less, and as they drew nearer the pylone they could see that it was erected on a low mass of rocks that was the sole interruption to the dull level of the field of ice. No wreath of smoke rose above the little island ; it was manifestly impossible, they conceived, that any human being could there have survived the cold ; the sad presentiment forced itself upon their minds that it was a mere cairn to which they had been hurrying.

Ten minutes later, and they were so near the rock that

the Lieutenant took in his sail, convinced that the impetus already attained would be sufficient to carry him to the land. Servadac's heart bounded as he caught sight of a fragment of blue canvas fluttering in the wind from the top of the pylone : it was all that now remained of the French national standard. At the foot of the pylone stood a miserable shed, its shutters tightly closed. No other habitation was to be seen ; the entire island was less than a quarter of a mile in circumference ; and the conclusion was irresistible that it was the sole surviving remnant of Formentera, once a member of the Balearic Archipelago.

To leap on shore, to clamber over the slippery stones, and to reach the cabin was but the work of a few moments. The worm-eaten door was bolted on the inside. Servadac began to knock with all his might. No answer. Neither shouting nor knocking could draw forth a reply.

" Let us force it open, Procope ! " he said.

The two men put their shoulders to the door, which soon yielded to their vigorous efforts, and they found themselves inside the shed, and in almost total darkness. By opening a shutter they admitted what daylight they could. At first sight the wretched place seemed to be deserted ; the little grate contained the ashes of a fire long since extinguished ; all looked black and desolate. Another instant's investigation, however, revealed a bed in the extreme corner, and extended on the bed a human form.

" Dead ! " sighed Servadac ; " dead of cold and hunger ! "

Lieutenant Procope bent down and anxiously contemplated the body.

" No ; he is alive ! " he said, and drawing a small flask from his pocket he poured a few drops of brandy between the lips of the senseless man.

There was a faint sigh, followed by a feeble voice, which uttered the one word :

" Gallia ? "

" Yes, yes ! Gallia ! " echoed Servadac, eagerly.

" My comet, my comet ! " said the voice, so low as to

be almost inaudible, and the unfortunate man relapsed again into unconsciousness.

"Where have I seen this man?" thought Servadac to himself; "his face is strangely familiar to me."

But it was no time for deliberation. Not a moment was to be lost in getting the unconscious astronomer away from his desolate quarters. He was soon conveyed to the yawl; his books, his scanty wardrobe, his papers, his instruments, and the black board which had served for his calculations, were quickly collected; the wind, by a fortuitous Providence, had shifted into a favourable quarter; they set their sail with all speed, and ere long were on their journey back from Formentera.

Thirty-six hours later, the brave travellers were greeted by the acclamations of their fellow-colonists, who had been most anxiously awaiting their re-appearance, and the still senseless *savant*, who had neither opened his eyes nor spoken a word throughout the journey, was safely deposited in the warmth and security of the great hall of Nina's Hive.

PART II

CHAPTER I

THE ASTRONOMER

By the return of the expedition, conveying its contribution from Formentera, the known population of Gallia was raised to a total of thirty-six.

On learning the details of his friends' discoveries, Count Timascheff did not hesitate in believing that the exhausted individual who was lying before him was the author alike of the two unsigned documents picked up at sea, and of the third statement so recently brought to hand by the carrier-pigeon. Manifestly, he had arrived at some knowledge of Gallia's movements : he had estimated her distance from the sun ; he had calculated the diminution of her tangential speed ; but there was nothing to show that he had arrived at the conclusions which were of the most paramount interest to them all. Had he ascertained the true character of her orbit ? had he established any data from which it would be possible to reckon what time must elapse before she would again approach the earth ?

The only intelligible words which the astronomer had uttered had been, " My comet ! "

To what could the exclamation refer ? Was it to be conjectured that a fragment of the earth had been chipped off by the collision of a comet ? and if so, was it implied that the name of the comet itself was Gallia, and were they mistaken in supposing that such was the name given by the *savant* to the little world that had been so suddenly launched into space ? Again and again they discussed these questions ; but no satisfactory answer could be found. The only man who was able to throw any light upon the subject was lying amongst them in an unconscious and half-dying condition.

Apart from motives of humanity, motives of self-interest

made it a matter of the deepest concern to restore animation to that senseless form. Ben Zoof, after making the encouraging remark that *savants* have as many lives as a cat, proceeded, with Negrete's assistance, to give the body such a vigorous rubbing as would have threatened serious injury to any ordinary mortal, whilst they administered cordials and restoratives from the *Dobryna's* medical stores powerful enough, one might think, to rouse the very dead.

Meanwhile the Captain was racking his brain in his exertions to recall what were the circumstances of his previous acquaintance with the Frenchman upon whose features he was gazing ; he only grew more and more convinced that he had once been familiar with them. Perhaps it was not altogether surprising that he had almost forgotten him ; he had never seen him since the days of his youth, that time of life which, with a certain show of justice, has been termed the age of ingratitude ; for, in point of fact, the astronomer was none other than Professor Palmyrin Rosette, Servadac's old science-master at the Lycée Charlemagne.

After completing his year of elementary studies, Hector Servadac had entered the school at St. Cyr, and from that time he and his former tutor had never met, so that naturally they would well-nigh pass from each other's recollection. One thing, however, on the other hand, might conduce to a mutual and permanent impression on their memories ; during the year at the Lycée, young Servadac, never of a very studious turn of mind, had contrived, as the ringleader of a set of like calibre as himself, to lead the poor Professor a life of perpetual torment. If grains of nitrous salts were surreptitiously mixed with the distilled water in the laboratory so that various chemical experiments terminated with the most unexpected results ; if a portion of quicksilver was extracted from the tube of the barometer so that the instrument registered a condition of things quite anomalous to the state of the atmosphere ; if the thermometer was cunningly heated just at the very

moment when the Professor was known to be going to consult it ; if living insects were found to be crawling between the lenses of the telescope ; if the isolation of the electric battery was clandestinely destroyed so that not a spark could be elicited ; if a hole infinitesimally small was punctured in the pneumatic machine so that no perseverance could exhaust the air ; every trick was sure to be traced to Servadac at the head of his mischievous accomplices, whose enjoyment of the joke was intensified to no small degree by the uncontrolled fury of the disconcerted Professor. The little man on the discovery of each delinquency would fume and rage in a manner that was a source of unbounded delight to his audience.

Two years after Servadac left the Lycée, Professor Rosette had thrown up all educational employment in order that he might devote himself entirely to the study of astronomy. He endeavoured to obtain a post at the Observatory, but his ungenial character was so well known in scientific circles that he failed in his application ; however, having some small private means, he determined on his own account to carry on his researches without any official salary. He had really considerable genius for the science that he had adopted ; besides discovering three of the latest of the telescopic planets, he had worked out the elements of the three hundred and twenty-fifth comet in the catalogue ; but his chief delight was to criticise the publications of other astronomers, and he was never better pleased than when he detected a flaw in their reckonings.

When Ben Zoof and Negrete had extricated their patient from the envelope of furs in which he had been wrapped by Servadac and the Lieutenant, they found themselves face to face with a shrivelled little man, about five feet two inches high, with a round bald head, smooth and shiny as an ostrich's egg, no beard unless the unshorn growth of a week could be so described, and a long hooked nose that supported a huge pair of spectacles such as with many near-sighted people seems to have become a part of their

individuality. His nervous system was remarkably developed, and his body might not inaptly be compared to one of the Rhumkorff bobbins of which the thread, several hundred yards in length, is permeated throughout by electric fluid. But whatever he was, his life, if possible, must be preserved. When he had been partially divested of his clothing, his heart was found to be still beating, though very feebly. Asserting that while there was life there was hope, Ben Zoof recommenced his friction with more vigour than ever, humming all the time (as though he were polishing his sabre for parade) the military refrain :

“ Au tripoli,¹ fils de la gloire,
Tu dois l'éclat de ton acier.”

When the rubbing had been continued without a moment's intermission for the best part of half an hour, the astronomer heaved a faint sigh, which ere long was followed by another and another. He half opened his eyes, closed them again, then opened them completely, but without exhibiting any consciousness whatever of his situation. A few words seemed to escape his lips, but they were quite unintelligible. Presently he raised his right hand to his forehead as though instinctively feeling for something that was missing ; then, all of a sudden, his features became contracted, his face flushed with apparent irritation, and he exclaimed fretfully :

“ My spectacles !—where are my spectacles ? ”

In order to facilitate his operations, Ben Zoof had removed the spectacles in spite of the tenacity with which they seemed to adhere to the temples of his patient ; but he now rapidly brought them back and readjusted them as best he could to what seemed to be their natural position on the aquiline nose. The Professor heaved a long sigh of relief, and once more closed his eyes.

Before long the astronomer roused himself a little more,

¹ Tripoli : a powder for polishing metals.

and glanced inquiringly about him, but soon relapsed into his comatose condition.

When next he opened his eyes, Captain Servadac happened to be bending down closely over him, examining his features with curious scrutiny. The old man darted an angry look at him through the spectacles, and said sharply :

“ Servadac, five hundred lines to-morrow ! ”

It was an echo of days of old. The words were few, but they were enough to recall the identity which Servadac was trying to make out.

“ Is it possible ? ” he exclaimed. “ Here is my old tutor, Mr. Rosette, in very flesh and blood.”

“ Can’t say much for the flesh,” muttered Ben Zoof.

The old man had again fallen back into a torpid slumber. Ben Zoof continued :

“ His sleep is getting more composed. Let him alone ; he will come round yet. Haven’t I heard of men more dried up than he is, being brought all the way from Egypt in cases covered with pictures ? ”

“ You idiot !—those were mummies ; they had been dead for ages.”

Ben Zoof did not answer a word. He went on preparing a warm bed, into which he managed to remove his patient, who appeared very soon to fall into a calm and natural sleep.

Too impatient to await the awakening of the astronomer and to hear what representations he had to make, Servadac, the Count, and the Lieutenant, constituting themselves what might be designated “ the Academy of Sciences ” of the colony, spent the whole of the remainder of the day in starting and discussing the wildest conjectures about their situation. The hypothesis, to which they had now accustomed themselves for so long, that a new asteroid had been formed by a fracture of the earth’s surface, seemed to fall to the ground when they found that Professor Palmyrin Rosette had associated the name of Gallia, not with their present home, but with what he

called "my comet"; and that theory being abandoned, they were driven to make the most improbable speculations to replace it.

Alluding to Rosette, Servadac took care to inform his companions that, although the Professor was always eccentric, and at times very irascible, yet he was really exceedingly good-hearted; his bark was worse than his bite; and if suffered to take their course without observation, his outbreaks of ill-temper seldom lasted long.

"We will certainly do our best to get on with him," said the Count. "He is no doubt the author of the papers, and we must hope that he will be able to give us some valuable information."

"Beyond a question the documents have originated with him," assented the Lieutenant. "Gallia was the word written at the top of every one of them, and Gallia was the first word uttered by him in our hearing."

The astronomer slept on. Meanwhile, the three together had no hesitation in examining his papers, and scrutinising the figures on his extemporised black board. The handwriting corresponded with that of the papers already received; the black board was covered with algebraical symbols traced in chalk, which they were careful not to obliterate; and the papers, which consisted for the most part of detached scraps, presented a perfect wilderness of geometrical figures, conic sections of every variety being repeated in countless profusion.

Lieutenant Procope pointed out that these curves evidently had reference to the orbits of comets, which are variously parabolic, hyperbolic, or elliptic. If either of the first two, the comet, after once appearing within the range of terrestrial vision, would vanish for ever in the outlying regions of space; if the last, it would be sure, sooner or later, after some periodic interval, to return.

From the *primâ facie* appearance of his papers, then, it seemed probable that the astronomer, during his sojourn at Formentera, had been devoting himself to the study of

cometary orbits ; and as calculations of this kind are ordinarily based upon the assumption that the orbit is a parabola, it was not unlikely that he had been endeavouring to trace the path of some particular comet.

"I wonder whether these calculations were made before or after the 1st of January : it makes all the difference," said Lieutenant Procope.

"We must bide our time and hear," replied the Count.

Servadac paced restlessly up and down.

"I would give a month of my life," he cried, impetuously, "for every hour that the old fellow goes sleeping on."

"You might be making a bad bargain," said Procope, smiling. "Perhaps after all the comet has had nothing to do with the convulsion that we have experienced."

"Nonsense !" exclaimed the Captain ; "I know better than that, and so do you. Is it not as clear as daylight that the earth and this comet have been in collision, and the result has been that our little world has been split off and sent flying far into space ?"

Count Timascheff and the Lieutenant looked at each other in silence.

"I do not deny your theory," said Procope after a while. "If it be correct, I suppose we must conclude that the enormous disc we observed on the night of the catastrophe was the comet itself ; and the velocity with which it was travelling must have been so great that it was hardly arrested at all by the attraction of the earth."

"Plausible enough," answered Count Timascheff ; "and it is to this comet that our scientific friend here has given the name of Gallia."

It still remained a puzzle to them all why the astronomer should apparently be interested in the comet so much more than in the new little world in which their strange lot was cast.

"Can you explain this ?" asked the Count.

"There is no accounting for the freaks of philosophers, you know," said Servadac ; "and have I not told you that

this philosopher in particular is one of the most eccentric beings in creation ? ”

“ Besides,” added the Lieutenant, “ it is exceedingly likely that his observations had been going on for some considerable period before the convulsion happened.”

Thus, the general conclusion arrived at by the Gallian Academy of Science was this : That on the night of the 31st of December, a comet, crossing the ecliptic, had come into collision with the earth, and that the violence of the shock had separated a huge fragment from the globe, which fragment from that date had been traversing the remote inter-planetary regions.

Palmyrin Rosette would doubtless confirm their solution of the phenomenon.

CHAPTER II

A REVELATION

TO the general population of the colony the arrival of the stranger was a matter of small interest. The Spaniards were naturally too indolent to be affected in any way by an incident that concerned themselves so remotely ; while the Russians felt themselves simply reliant on their master, and as long as they were with him were careless as to where or how they spent their days. Everything went on with them in an accustomed routine ; and they lay down night after night, and awoke to their avocations morning after morning, just as if nothing extraordinary had occurred.

All night long Ben Zoof would not leave the Professor's bedside. He had constituted himself sick nurse, and considered his reputation at stake if he failed to set his patient on his feet again. He watched every movement, listened to every breath, and never failed to administer the strongest cordials upon the slightest pretext. Even in his sleep Rosette's irritable nature revealed itself. Ever and again,

sometimes in a tone of uneasiness, and sometimes with the expression of positive anger, the name of Gallia escaped his lips, as though he were dreaming that his claim to the discovery of the comet was being contested or denied ; but although his attendant was on the alert to gather all he could, he was able to catch nothing in the incoherent sentences that served to throw any real light upon the problem that they were all eager to solve.

Gradually, however, the uneasy murmurings subsided, and gave place to snores, deep and sonorous, which augured favourably for an ultimate recovery.

When the sun re-appeared on the western horizon the Professor was still sound asleep ; and Ben Zoof, who was especially anxious that the repose which promised to be so beneficial should not be disturbed, felt considerable annoyance at hearing a loud knocking, evidently of some blunt heavy instrument against a door that had been placed at the entrance of the gallery, more for the purpose of retaining internal warmth than for guarding against intrusion from without. The first thought of the orderly was that he would leave his patient and go to ascertain the cause of the disturbance, but finding that the noise had ceased, and remembering that there were others at hand to attend to the door, he resolved to remain where he was.

It was not very long, however, before the knocking began again. Ben Zoof waited and waited on, in the expectation that the noise would attract attention elsewhere ; but the sleep of the inmates of Nina's Hive was too profound to be broken.

The knocking still went on.

" Confound it ! " said Ben Zoof. " I must put a stop to this " ; and he made his way towards the door.

" Who's there ? " he cried, in no very amiable tone.

" I," replied a quavering voice.

" Who are you ? "

" Isaac Hakkabut. Let me in ; do, please, let me in."

"Oh, it is you, old Ashtaroth, is it? What do you want? Can't you get anybody to buy your stuffs?"

"Nobody will pay me a proper price."

"Well, old Shimei, you won't find a customer here. You had better be off."

"No; but do, please—do, please, let me in," supplicated the Jew. "I want to speak to his Excellency, the Governor."

"The Governor is in bed, and asleep."

"I can wait until he awakes."

"Then wait where you are."

And with this inhospitable rejoinder the orderly was about to return to his place at the side of his patient, when Servadac, who had been roused by the sound of voices, called out:

"What's the matter, Ben Zoof?"

"Oh, nothing, sir; only that hound of a Hakkabut says he wants to speak to you."

"Let him in, then."

Ben Zoof hesitated.

"Let him in, I say," repeated the Captain, peremptorily. However reluctantly, Ben Zoof obeyed.

The door was unfastened, and Isaac Hakkabut, enveloped in an old overcoat, shuffled into the gallery.

In a few moments Servadac approached, and the Jew began to overwhelm him with the most obsequious epithets. Without vouchsafing any reply, the Captain beckoned to the old man to follow him, and leading the way to the central hall, stopped, and turning so as to look him steadily in the face, said:

"Now is your opportunity. Tell me what you want."

"Oh, my lord, my lord," whined Isaac, "you must have some news to tell me."

"News? What do you mean?"

"From my little tartan yonder, I saw the yawl go out from the rock here on a journey, and I saw it come back, and it brought a stranger; and I thought—I thought—I thought——"

"Well, you thought—what did you think?"

"Why, that perhaps the stranger had come from the northern shores of the Mediterranean, and that I might ask him——"

He paused again, and gave an inquiring glance at the Captain.

"Ask him what? Speak out, man!"

"Ask him if he brings any tidings of Europe," Hakkabut blurted out at last.

Servadac shrugged his shoulders in contempt and turned away. Here was a man who had been resident three months in Gallia, a living witness of all the abnormal phenomena that had occurred, and yet refusing to believe that his hope of making good bargains with European traders was at an end. Surely nothing, thought the Captain, will convince the old rascal now; and he moved off in disgust. The orderly, however, who had listened with much amusement, was by no means disinclined for the conversation to be continued.

"Are you satisfied, old Ezekiel?" he asked.

"Isn't it so? Am I not right? Didn't a stranger arrive here last night?" inquired the Jew.

"Yes, quite true."

"Where from?"

"From the Balearic Isles."

"The Balearic Isles?" echoed Isaac.

"Yes."

"Fine quarters for trade! Hardly five and twenty leagues from Spain! He must have brought news from Europe!"

"Well, old Manasseh, what if he has?"

"I should like to see him."

"Can't be."

The Jew sidled close up to Ben Zoof, and laying his hand on his arm, said in a low and insinuating tone:

"I am poor, you know; but I would give you a few reals if you would let me talk to this stranger."

But as if he thought he was making too liberal an offer, he added :

“ Only it must be at once.”

“ He is too tired ; he is worn out ; he is fast asleep,” answered Ben Zoof.

“ But I would pay you to wake him.”

The Captain had overheard the tenour of the conversation, and interposed sternly :

“ Hakkabut ! if you make the least attempt to disturb our visitor, I shall have you turned outside that door immediately.”

“ No offence, my lord, I hope,” stammered out the Jew.

“ I only meant . . .”

“ Silence ! ” shouted Servadac.

The old man hung his head, abashed.

“ I will tell you what,” said Servadac after a brief interval ; “ I will give you leave to hear what this stranger has to tell as soon as he is able to tell us anything ; at present we have not heard a word from his lips.”

The Jew looked perplexed.

“ Yes,” said Servadac ; “ when we hear his story, you shall hear it too.”

“ And I hope it will be to your liking, old Ezekiel ! ” added Ben Zoof in a voice of irony.

They had none of them long to wait, for within a few minutes Rosette’s peevish voice was heard calling :

“ Joseph ! Joseph ! ”

The Professor did not open his eyes, and appeared to be slumbering on, but very shortly afterwards called out again :

“ Joseph ! Confound the fellow ! where is he ? ”

It was evident that he was half dreaming about a former servant now far away on the ancient globe.

“ Where’s my black board, Joseph ? ”

“ Quite safe, sir,” answered Ben Zoof, quickly.

Rosette unclosed his eyes and fixed them full upon the orderly’s face.

“ Are you Joseph ? ” he asked.

"At your service, sir," replied Ben Zoof with imper-
turbable gravity.

"Then get me my coffee, and be quick about it."

Ben Zoof left to go into the kitchen, and Servadac
approached the Professor in order to assist him in rising
to a sitting posture.

"Do you recognise your quondam pupil, Professor?"
he asked.

"Ah, yes, yes; you are Servadac," replied Rosette. "It
is twelve years or more since I saw you; I hope you have
improved."

"Quite a reformed character, sir, I assure you," said
Servadac, smiling.

"Well, that's as it should be; that's right," said the
astronomer with fussy importance. "But let me have my
coffee," he added impatiently; "I cannot collect my
thoughts without my coffee."

Fortunately, Ben Zoof appeared with a great cup, hot
and strong. After draining it with much apparent relish,
the Professor got out of bed, walked into the common hall,
round which he glanced with a preoccupied air, and
proceeded to seat himself in an armchair, the most com-
fortable which the cabin of the *Dobryna* had supplied. Then,
in a voice full of satisfaction, and that involuntarily
recalled the exclamations of delight that had wound up
the two first of the mysterious documents that had been
received, he burst out:

"Well, gentlemen, what do you think of Gallia?"

There was no time for anyone to make a reply before
Isaac Hakkabut had darted forward.

"By the God . . ."

"Who is that?" asked the startled Professor; and he
frowned, and made a gesture of repugnance.

Regardless of the efforts that were made to silence him,
the Jew continued:

"By the God of Abraham, I beseech you, give me some
tidings of Europe!"

"Europe?" shouted the Professor, springing from his seat as if he were electrified; "what does the man want with Europe?"

"I want to get there!" screeched the Jew; and in spite of every exertion to get him away, he clung most tenaciously to the Professor's chair, and again and again implored for news of Europe.

Rosette made no immediate reply. After a moment or two's reflection, he turned to Servadac and asked him whether it was not the middle of April.

"It is the twentieth," answered the Captain.

"Then to-day," said the astronomer, speaking with the greatest deliberation, "to-day we are just three millions of leagues away from Europe."

The Jew was utterly crestfallen.

"You seem here," continued the Professor, "to be very ignorant of the state of things."

"How far we are ignorant," rejoined Servadac, "I cannot tell. But I will tell you all that we do know, and all that we have surmised."

And as briefly as he could, he related all that had happened since the memorable night of the 31st of December; how they had experienced the shock; how the *Dobryna* had made her voyage; how they had discovered nothing except the fragments of the old continent at Tunis, Sardinia, Gibraltar, and now at Formentera; how at intervals the three anonymous documents had been received; and, finally, how the settlement at Gourbi Island had been abandoned for their present quarters at Nina's Hive.

The astronomer had hardly patience to hear him to the end.

"And what do you say is your surmise as to your present position?" he asked.

"Our supposition," the Captain replied, "is this. We imagine that we are on a considerable fragment of the terrestrial globe that has been detached by collision with

a planet to which you appear to have given the name of Gallia."

"Better than that!" cried Rosette, starting to his feet with excitement.

"How? Why? What do you mean?" cried the voices of the listeners.

"You are correct to a certain degree," continued the Professor. "It is quite true that at 47' 35.6" after two o'clock on the morning of the first of January there was a collision; my comet grazed the earth; and the bits of the earth which you have named were carried clean away."

They were all fairly bewildered.

"Where, then," cried Servadac eagerly, "where are we?"

"You are on my comet, on Gallia itself!"

And the Professor gazed around him with a perfect air of triumph.

CHAPTER III

COMETS, OLD AND NEW

As if moved by some unconscious presentiment of his future destiny, Professor Palmyrin Rosette had always evidenced a strong predilection for the study of comets. He had based his opinions on the best authorities, and was never more in his element than when he was expatiating on his favourite theme as he presided at some astronomical conference.

"Comets, gentlemen," he would say, "are nebulous bodies which occasionally appear in the heavens, consisting ordinarily of a bright central light called the *nucleus*, and in the more conspicuous cases accompanied by a long trail of light called the *tail*. Owing to the great eccentricity of their orbits, they are visible to the earth during only a portion of their course."

The Professor never failed to point out the two characteristics by which they were to be distinguished from other heavenly bodies :

“ Although these comets, gentlemen, may be deficient either with respect to the luminous tail or to the nebulous coma, the progressive motion with which they are endued prevents them from ever being mistaken for fixed stars, while the extreme length of the ellipses which they describe makes it impossible to confound them with planets.”

During the long years of the astronomer's application to his fascinating study, he had composed an elaborate treatise, exhibiting the results of all his investigations, and when, after the sudden convulsion, he found himself actually upon the surface of one of the very bodies the properties of which had engrossed so much of his interest, it was necessarily a disappointment to feel that, alone upon Formentera, he had no audience to whom he could address himself.

The treatise which Rosette had compiled had been arranged under four distinct heads :

1. The number of comets.
2. Periodic and non-periodic comets.
3. The probability of collision between a comet and the earth.
4. The consequences of such a collision.

First : with respect to the number of comets, the Professor had recorded that, according to Arago, who grounded his estimate on the number that revolve between Mercury and the sun, there are at least 17,000,000 of these luminous bodies in our solar system ; whilst Lambert asserts that within the orbit of Saturn, that is, within a radius of 872,135,000 miles, there are no less than 500,000,000. According to Kepler, two hundred years previously, the number of comets can only be compared to the fishes in the sea, and in following out his simile he declares that an angler throwing out his line from the surface of the sun could not fail to touch several of them ; and now in recent

times a computation has been made that their aggregate reaches a total of 74,000,000,000 distinct comets. The truth seems to be that their number really sets all calculation at defiance ; so erratic, moreover, are their movements, that they sometimes pass from system to system, and whilst some, entirely escaping the influence of the sun, vanish, to find a new centre of attraction, others never before observed make their appearance upon the terrestrial horizon.

Even the comets which belong exclusively to our own system are by no means exempt from strange irregularities ; the orbits, of several, ceasing to be ellipses, have become parabolas or hyperbolas ; and the planets, Jupiter in particular, have been observed to exercise a large disturbing action upon their paths.

Secondly : under the head of periodic and non-periodic comets, Professor Rosette had stated that as many as 500 or 600 comets have been made objects of careful astronomical investigation ; those being called “ periodic ” of which the return at fixed intervals has been established as a certainty ; those, on the other hand, being classed as “ non-periodic ” which recede to such immeasurable distances from the sun that it cannot be determined whether they will return or not.

Of the periodic comets there are not more than *forty* of which the times of their revolution have been ascertained with exact precision ; but of these there are *ten*, generally known as the “ short-period comets,” the movements of which have been established with the nicest accuracy.

The short-period comets are respectively called by the names of their discoverers, and are commonly distinguished as Halley’s comet, Encke’s, Gambart’s or Biela’s, Faye’s, Brörsen’s, D’Arrest’s, Tuttle’s, Winnecke’s, De Vico’s, and Tempel’s.

Subjoined is a brief account of each of these in detail.

Halley’s comet is that which has been the longest known.

It is supposed to be identical with the one which was

observed in the years 134 and 52 B.C., and afterwards in the years 400, 855, 930, 1006, 1230, 1305, 1380, 1456, 1531, 1607, 1682, 1759, and 1835 A.D. It revolves from east to west, in a direction contrary to the planets. The intervals between its consecutive appearances vary from 75 to 76 years, according as its course is less or more disturbed by the attraction of Jupiter and Saturn, which sometimes influence its course to such an extent as to make a difference of 200 days in the period of its arrival. The last appearance of this comet was in 1835, when Sir John Herschel, at the Cape of Good Hope, a more favourable station for observation than any in the northern hemisphere, was able to watch it until the end of March, 1836, after which its distance from the earth rendered it invisible. At its aphelion it is 3,200,000,000 miles from the sun, that is to say, it is beyond the orbit of Neptune, but at its perihelion it is less than 57,000,000 miles from the sun, and consequently is nearer than the planet Venus.

Little did the Professor dream, at the time when he drew up his treatise, that his own Gallia would transport him to a still closer proximity to the great luminary.

Encke's comet has the shortest period of any, its revolution being accomplished in about 1,205 days, or less than three years and a half. Unlike Halley's, it moves as the planets, from west to east. It was observed on the 26th of November, 1818, and a calculation of its elements proved it to be identical with the comet of 1805. According to prediction, it was seen again in 1822, and since that time has never failed in making its appearance at regular intervals. Its orbit lies within that of Jupiter, and it never recedes more than 387,000,000 miles from the sun, its perihelion distance being only 32,000,000 miles, or less than that of Mercury.

One important observation that has been made with regard to Encke's comet, places it beyond doubt that the axis major of its elliptical orbit is gradually diminishing, and consequently its average distance from the sun is

growing continuously less and less, so that the probability arises that unless it is previously volatilised by the solar heat, it may be ultimately absorbed in the sun itself.

Gambart's comet (otherwise known as Biela's) was noticed in 1772, 1789, 1795, and 1805 ; but it was not until the 28th of February, 1826, that its elements were satisfactorily determined. Its motion is direct, and its period of revolution 2,410 days, or about seven years. At perihelion it passes 82,000,000 miles from the sun, rather nearer than the earth ; at aphelion it is beyond the orbit of Jupiter.

A singular phenomenon with regard to Biela's comet was first observed in the year 1846 : it appeared like a double star, in two distinct fragments, doubtless sundered by the action of some internal force ; these fragments travelled together at an interval of about 160,000 miles apart, but at the next appearance in 1852 this interval was found to be largely increased.

Faye's comet was discovered by him for the first time on the 22nd of November, 1843. The elements of its orbit were calculated, and it was predicted that it would return again in 1851, after a period of 2,718 days, or in about seven years and a half. The prediction was realised ; the comet was visible at the time announced, and has subsequently appeared at similar intervals. Its motion is direct. At perihelion it is 192,000,000 miles from the sun, never approaching so near as Mars ; at aphelion it is distant 603,000,000 miles, so that it recedes, like Biela's comet, beyond the pathway of Jupiter.

Brörsen's comet was discovered on the 26th of February, 1846. Its movement is from west to east ; it accomplishes its revolution in about 2,042 days ; its perihelion distance is 64,000,000 miles, its aphelion 537,000,000 miles.

Of the other short-period comets, D'Arrest's, which in 1862 passed within 30,000,000 miles of the planet Jupiter, completes its revolution in rather more than six years and a half ; Tuttle's revolves in thirteen years and eight

months ; Winnecke's and Tempel's in about five years and a half ; whilst that of De Vico, after being computed to revolve in a period of rather more than five years, seems to have wandered away altogether into space.

Then follows a short enumeration of some of the " long-period " comets.

The comet of 1556, commonly called the comet of Charles-Quint, was expected again in 1860, but did not re-appear.

The comet of 1680 furnished the data for Newton's cometary theories, and, according to Whiston, was the cause of the deluge, on account of its close approximation to the earth. Its revolution takes about 575 years, so that it was visible in 1106 and 531, as well as in 43 B.C. and probably in 619 B.C. At its perihelion it passes so near the sun that it receives 28,000 times more heat than the earth, that is, it is 2,000 times hotter than molten iron.

The comet of 1744 was by far the most brilliant of the eighteenth century ; it was seen on the 1st of March in full daylight, and had six tails, spread out like a fan across a large space in the heavens.

The great comet of 1811, which has caused the year of its appearance to be familiarly recognised as " the comet-year," had a nucleus 2,637 miles in diameter ; its head was 1,270,000 miles in diameter, and its tail 100,000,000 miles in length.

The comet of 1843, observed by Cassini, has been supposed to be identical with that of 1668, 1494, and 1317, but astronomers are not agreed upon the period of its revolution. At its perihelion it passes nearer to the sun than any other comet recorded in history, travelling at a rate of more than 40,000 miles a second. The heat that it thus receives is equal to that which 47,000 suns would communicate to the earth, and to such a degree does this prodigious temperature increase its density, that at its last appearance its tail was visible in broad daylight.

Donati's comet, which in 1858 shone with such brilliancy

amongst the northern constellations, has a mass that has been estimated at .07 of that of the earth.

The comet of 1862 was adorned with luminous tufts or aigrettes, and resembled some fantastic mollusc.

The list is completed by the comet of 1868, the revolution of which occupies a period of no less than 2,800 centuries, so that it may practically be considered as having vanished in infinite space.

Thirdly : the next section of the Professor's dissertation was devoted to the probability of a collision between any one of these numerous comets and the earth.

As represented in plane diagrams, the orbits of planetary and cometary bodies appear continually to be intersecting one another ; but in free space of three dimensions this is by no means necessarily the case ; the planes of the orbits being inclined at various angles to the ecliptic, which is the plane of the terrestrial orbit. Nevertheless, out of the large number of comets, is it impossible that one of them should come in contact with the earth ?

In conducting this investigation, it had to be recollected that as the earth never leaves the plane of the ecliptic, three conditions must be fulfilled in order to bring about the result of impact : first, the comet must meet the earth in the ecliptic ; secondly, the earth and the comet must arrive at the point of intersection of their orbits at the same moment ; and thirdly, the distance between the centres of the bodies themselves must be less than the sum of their radii. The problem, therefore, resolved itself into an inquiry whether these three conditions could occur simultaneously.

Laplace did not reject the possibility of such an encounter, and in his " *Exposition du Système du Monde* " has at some length detailed the consequences. Arago, when asked his opinion on the subject, replied that by calculation there were 280,000,000 chances to 1 against a collision. The illustrious astronomer, however, based his estimate upon two conditions that are only fulfilled with

the greatest uncertainty ; in the first place, that at perihelion the comet should be nearer the sun than the earth is ; and in the next, that the diameter of the comet should be equal to one-fourth of that of the earth. On the other hand, he only reckoned for the earth coming in contact with the actual nucleus, whilst if the whole extent of the nebulosity were to be taken into account, the chances of collision would be increased tenfold.

In enunciating his problem, Arago adds :

“ If we take it for granted that the result of a comet running foul of the earth would be the total annihilation of the human race, then the risk of death which each individual incurs from the probability of such a catastrophe is just what would be his chance of drawing, at the first draw, the only white ball out of an urn containing 280,000,000 coloured ones.” So remote appear the chances of collision.

All astronomers, moreover, concur in distinctly denying that any such collision has ever happened. Arago asserts that if it had happened, the consequences would have been an immediate alteration in the earth's axis of rotation, and a general disturbance of terrestrial latitudes ; but he alleges no evidence in proof of his assertion. He speaks, however, much more to the purpose when he declares that “ the theory held by some, that the depression of the Caspian Sea 300 feet below the level of the ocean is to be attributed to the shock of a comet, is utterly untenable.”

But the matter under consideration was not whether collision had ever occurred, but whether it ever could occur.

Now in 1832, at the re-appearance of Gambart's comet, the world was thrown into some alarm because it was announced as the result of astronomical calculations, that at the time of the passage of the comet through its descending node on the 29th of October, the earth would be travelling precisely in the same region. Contact seemed not only probable but inevitable, if Olbers' observation

was correct, that the radius of the comet was five times as large as that of the earth. Happily, however, the earth did not arrive at that point of the ecliptic until the 30th of November by which time the comet was more than 50,000,000 miles away. But supposing that the earth had reached that place of intersection of the two orbits a month sooner or the comet a month later, it is hard to say what could have obviated the likelihood of collision. At the very least, some singular perturbations must have ensued. In 1805 indeed, this identical comet had passed within 6,000,000 miles of the earth, ten times closer than in 1832, but as its proximity was unknown, the fact did not excite any panic.

Again in 1843 there seemed reasonable ground for fear that the atmosphere of the earth would be vitiated by passing through the nebulous tail of a comet 150,000,000 miles in length.

Altogether, therefore, from the entire evidence, it appeared a necessary inference that collision between the earth and a comet was by no means impossible.

Fourthly, then, Professor Rosette had to discuss the remaining question to bring his treatise to a close ; as to the probable consequences of such a collision.

These consequences would manifestly vary according as the comet had or had not a nucleus. As some fruits have no kernel, so some comets have no nucleus, and such is the tenuity of their substance, that stars of the tenth magnitude have been seen through them without any sensible diminution of light. It is a property that must make their external form very susceptible of change, and tends in a degree to make them difficult of recognition. The same transparency characterises the tail, the development of which is apparently due entirely to the evaporation of the coma under the action of solar heat ; in proof of which it is notified that no tail, either single or multiple, has ever been found attached to a comet until that comet has arrived within 80,000,000 miles of the sun ; whilst it

has been observed that some comets, presumably composed of denser structure, have emitted no tail at all.

In the case of the earth coming into contact with a comet destitute of a nucleus, there would be no violent collision ; strictly speaking, there would be no shock at all. The astronomer Faye asserts that a cannon ball would find more resistance in a cobweb than in the nebulous parts of a comet ; and for the nebulous matter to be injurious, it must either be incandescent, in which case it would scorch up the surface of the earth, or it must be impregnated with noxious elements, in which case it might be fatally destructive to life. This later contingency, however, is unlikely to arise ; for, according to Babinet, the earth's atmosphere possesses sufficient density of its own to resist the penetration of any cometary vapours, of which the tenuity is so slight, that Newton has calculated that if a comet, without a nucleus, 1,000,000,000 miles in radius, were reduced to the density of the air at the earth's surface, it might all be contained in a thimble less than an inch in diameter.

Concluding thus that from comets purely nebulous there was a minimum of danger to be apprehended, the Professor proceeded to inquire what would be the result of concussion if the comet consisted of a solid nucleus.

First of all, however, rises the preliminary question whether in any case the nucleus of a comet is really solid. There can be no doubt that if a comet can attain a degree of concentration sufficient to pass out of its gaseous condition, it will, if interposed between the earth and a star, make an occultation of that star. No sound reliance is to be placed on testimony such as that of Anaxagoras, who, living in the time of Xerxes, about the year 480 B.C., recorded that the sun was eclipsed by a comet ; nor on that of Dion, who maintains that a similar eclipse occurred a few days before the death of Augustus, which could not be occasioned by the moon, then in direct opposition. Modern science has, with more than sufficient justice, entirely

repudiated the accuracy of these statements ; but the indisputable testimony of recent observation all goes to establish the certainty of the existence of comets with a solid nucleus. The comets of 1774 and of 1828 are known to have caused the occultation of stars of the eighth magnitude ; it is admitted on all hands that the comets of 1402, 1532, and 1744 were solid masses ; whilst, as for the comet of 1843, the fact is patent to the world that the body could be seen close to the sun, in broad daylight, by the naked eye.

Not only, therefore, do they exist, but in some cases these solid nuclei have been actually measured. Their diameters vary considerably in length ; that of Gambart's comet being only 30 or 40 miles, that of the comet of 1845 being 8,800 miles, considerably longer than the diameter of the earth, so that in the event of a collision between the two bodies, the preponderance would have been on the side of the comet. The nebulous surroundings have also, in a variety of instances, been measured, and found to vary from 200,000 to 1,000,000 miles in diameter.

Upon the whole, modern investigation bears out the general statement of M. Arago that there are three kinds of comets ; that is to say, comets without any nucleus ; comets with a transparent nucleus ; and comets with a nucleus both solid and opaque.

It had to be borne in mind that without any actual shock by collision, the mere proximity of a comet to the earth might entail some very singular phenomena. Not that from a comet of inferior mass any serious consequences could be expected, for the comet of 1770, which approached within 1,600,000 miles of the earth, did not affect the length of the terrestrial year a single second, although the action of the earth retarded the period of the comet's revolution by three whole days. But if the mass of the two bodies were equal, and if the comet passed within 150,000 miles of the earth, the result would be that the terrestrial year would be prolonged by sixteen hours and five minutes,

and the obliquity of the ecliptic altered by two degrees, to say nothing of the chance that the comet might capture the moon in its passage.

What, finally, would happen in the event of the one body actually impinging on the other? The consequences, manifestly, would be far more considerable. Either the comet, in grazing the earth's surface, would leave behind it a fragment detached from itself, or it would carry off with itself a fragment detached from the earth. If, instead of being oblique, the impact should be direct, there would at least be a rupture of continents, even if the globe were not shivered into pieces.

In any case, the tangential velocity of the earth must receive a sudden check or a sudden impulse; trees, houses, living creatures, would be precipitated backwards or forwards with increased momentum; the seas, dashed from their natural basins would overwhelm all that lay in the path of their projection; the central forces of the globe, still in their normal state of fusion, would be propelled to the surface; the terrestrial axis would undergo a change in its direction, so that a new equator would be established, and as the conditions of equilibrium would be disturbed, there might be nothing properly to counterbalance the attraction of the sun, the consequence of which, by the law of gravity, would be that the earth, drawn perpetually on in a straight line, in the space of sixty-four days and a half would be absorbed into the elements of the great central luminary of the system.

One speculation there was which to the last remained doubtful; whether, according to Tyndall's theory that heat is only a form of motion, the velocity of the earth would not, under the sudden elevation of the temperature, mechanically transform itself into heat so intense, that through its action, the earth itself, in the course of a few seconds would be completely volatilized.

Such were the deductions of Palmyrin Rosette's treatise, which he brought to a conclusion by a repetition of the

philosopher's comforting assurance, that the chances were as 280,000,000 to 1 against the occurrence of any collision.

How little could the Professor, as he tabulated his scientific notes, anticipate his experiences in the future, with regard to his own Gallia !

How little could he foresee, that at some future *séance*, he would be in the position to say :

" You see, gentlemen, that we have drawn the one white ball from the urn ! "

CHAPTER IV

THE PROFESSOR'S EXPERIENCES

" Yes, my comet ! " repeated the Professor, and from time to time he knitted his brows, and looked around him with a defiant air, as though he could not get rid of the impression that some one was laying an unwarranted claim to its proprietorship, or that the individuals before him were intruders upon his own proper domain.

But for a considerable while, Servadac, the Count, and the Lieutenant remained silent and sunk in thought. Here then, at last, was the unriddling of the enigma they had been so long endeavouring to solve ; both the hypotheses they had formed in succession had now to give way before the announcement of the real truth. The first supposition, that the rotatory axis of the earth had been subject to some accidental modification, and the conjecture that replaced it, namely, that a certain portion of the terrestrial sphere had been splintered off and carried into space, had both now to yield to the representation that the earth had been grazed by an unknown comet, which had caught up some scattered fragments from its surface, and was bearing them far away into sidereal regions. Unfolded lay the past and the present before them ; but this only served to awaken a keener interest about the future. Could the Professor

throw any light upon that? they longed to inquire, but did not yet venture to ask him.

Meanwhile Rosette assumed a pompous professional air, and appeared to be waiting for the entire party to be ceremoniously introduced to him. Nothing unwilling to humour the vanity of the eccentric little man, Servadac proceeded to go through the expected formalities.

"Allow me to present to you my excellent friend, the Count Timascheff," he said.

"You are very welcome," said Rosette, bowing to the Count with a smile of condescension.

"Although I am not precisely a voluntary resident on your comet, Mr. Professor, I beg to acknowledge your courteous reception," gravely responded Timascheff.

Servadac could not quite conceal his amusement at the Count's irony, but continued :

"This is Lieutenant Procope, the officer in command of the *Dobryna*."

The Professor bowed again in frigid dignity.

"His yacht has conveyed us right round Gallia," added the Captain.

"Round Gallia?" eagerly exclaimed the Professor.

"Yes, entirely round it," answered Servadac, and without allowing time for reply, proceeded :

"And this is my orderly, Ben Zoof."

"Aide-de-camp to his Excellency the Governour of Gallia," interposed Ben Zoof himself, anxious to maintain his master's honour as well as his own.

Rosette scarcely bent his head.

The rest of the population of the Hive were all presented in succession : the Russian sailors, the Spaniards, young Pablo, and little Nina, on whom the Professor, evidently no lover of children, glared fiercely through his formidable spectacles. Isaac Hakkabut, after his introduction, begged to be allowed to ask one question.

"How soon may we hope to get back?" he inquired, imploringly.

“Get back!” rejoined Rosette, sharply; “who talks of getting back? We have hardly started yet.”

Seeing that the Professor was inclined to get angry, Captain Servadac adroitly gave a new turn to the conversation by asking him whether he would gratify them by relating his own recent experiences. The astronomer seemed pleased with the proposal, and at once commenced a verbose and somewhat circumlocutory address, of which the following summary presents the main features.

The French Government, being desirous of verifying the measurement already made of the arc of the meridian of Paris, appointed a scientific commission for that purpose. From that commission the name of Palmyrin Rosette was omitted, apparently for no other reason than his personal unpopularity. Furious at the slight, the Professor resolved to set to work independently on his own account, and declaring that there were inaccuracies in the previous geodesic operations, he determined to re-examine the results of the last triangulation which had united Formenter to the Spanish coast by a triangle, one of the sides of which measured over a hundred miles, the very operation which had already been so successfully accomplished by Arago and Biot.

Accordingly, leaving Paris for the Balearic Isles, he placed his observatory on the highest point of Formentera, and accompanied as he was only by his servant, Joseph, led the life of a recluse. He secured the services of a former assistant, and despatched him to a high peak on the coast of Spain, where he had to superintend a reverberator, which, with the aid of a glass, could be seen from Formentera. A few books and instruments, and two months' victuals, was all the baggage he took with him, except an excellent astronomical telescope, which was, indeed, almost part and parcel of himself, and with which he assiduously scanned the heavens, in the sanguine anticipation of making some discovery which would immortalise his name.

The task he had undertaken demanded the utmost

patience. Night after night, in order to fix the apex of his triangle, he had to linger on the watch for the assistant's signal-light, but he did not forget that his predecessors, Arago and Biot, had had to wait sixty-one days for a similar purpose. What retarded the work was the dense fog which, it has been already mentioned, at that time enveloped not only that part of Europe, but almost the entire world.

Never failing to turn to the best advantage the few intervals when the mist lifted a little, the astronomer would at the same time cast an inquiring glance at the firmament, as he was greatly interested in the revision of the chart of the heavens, in the region contiguous to the constellation Gemini.

To the naked eye this constellation consists of only six stars, but through a telescope ten inches in diameter, as many as six thousand are visible. Rosette, however, did not possess a reflector of this magnitude, and was obliged to content himself with the good but comparatively small instrument he had.

On one of these occasions, whilst carefully gauging the recesses of Gemini, he espied a bright speck which was unregistered in the chart, and which at first he took for a small star that had escaped being entered in the catalogue. But the observation of a few separate nights soon made it manifest that the star was rapidly changing its position with regard to the adjacent stars, and the astronomer's heart began to leap at the thought that the renown of the discovery of a new planet would be associated with his name.

Redoubling his attention, he soon satisfied himself that what he saw was not a planet ; the rapidity of its displacement rather forced him to the conjecture that it must be a comet, and this opinion was soon strengthened by the appearance of a coma, and subsequently confirmed, as the body approached the sun, by the development of a tail.

A comet ! The discovery was fatal to all further progress in the triangulation. However conscientiously the assistant

on the Spanish coast might look to the kindling of the beacon, Rosette had no glances to spare for that direction ; he had no eyes except for the one object of his notice, no thoughts apart from that one quarter of the firmament.

A comet ! No time must be lost in calculating its elements.

Now, in order to calculate the elements of a comet, it is always deemed the safest mode of procedure to assume the orbit to be a parabola. Ordinarily, comets are conspicuous at their perihelia, as being their shortest distances from the sun, which is the focus of their orbit, and inasmuch as a parabola is but an ellipse with its axis indefinitely produced, for some short portion of its pathway the orbit may be indifferently considered either one or the other ; but in this particular case the Professor was right in adopting the supposition of its being parabolic.

Just as in a circle, it is necessary to know three points to determine the circumference ; so in ascertaining the elements of a comet, three different positions must be observed before what astronomers call its "ephemeris" can be established.

But Professor Rosette did not content himself with three positions ; taking advantage of every rift in the fog he made ten, twenty, thirty observations both in right ascension and in declination, and succeeded in working out with the most minute accuracy the five elements of the comet which was evidently advancing with astounding rapidity towards the earth.

These elements were :

1. The inclination of the plane of the cometary orbit to the plane of the ecliptic, an angle which is generally considerable, but in this case the planes were proved to coincide.
2. The position of the ascending node, or the point where the comet crossed the terrestrial orbit.

These two elements being obtained, the position in space of the comet's orbit was determined.

3. The direction of the axis major of the orbit, which

was found by calculating the longitude of the comet's perihelion.

4. The perihelion distance from the sun, which settled the precise form of the parabola.

5. The motion of the comet, as being retrograde, or, unlike the planets, from east to west.¹

Rosette thus found himself able to calculate the date at which the comet would reach its perihelion, and, overjoyed at his discovery, without thinking of calling it Palmyra or Rosetta, after his own name, he resolved that it should be known as Gallia.

His next business was to draw up a formal report. Not only did he at once recognise that a collision with the earth was possible, but he soon foresaw that it was inevitable, and that it must happen on the night of the 31st of December; moreover, as the bodies were moving in opposite directions, the shock could hardly fail to be violent.

To say that he was elated at the prospect was far below the truth; his delight amounted almost to delirium. Any one else would have hurried from the solitude of Formentera in sheer fright; but, without communicating a word of his startling discovery, he remained resolutely at his post. From occasional newspapers which he had received, he had learnt that fogs, dense as ever, continued to envelop both hemispheres, so that he was assured that the existence of the comet was utterly unknown elsewhere; and the ignorance of the world as to the peril that threatened it averted the panic that would have followed the publication of the facts, and left the philosopher of Formentera in sole possession of the great secret. He clung to his post with the greater persistency, because his calculations had led him to the conclusion that the comet would strike the earth somewhere to the south of Algeria, and as it had a solid nucleus, he felt sure that, as he expressed it, the effect would be "unique," and he was anxious to be in the vicinity.

The shock came, and with it the results already recorded.

¹ Of 252 comets, 123 have a direct, and 129 a retrograde motion.

Palmyrin Rosette was suddenly separated from his servant Joseph, and when, after a long period of unconsciousness, he came to himself, he found that he was the solitary occupant of the only fragment that survived of the Balearic Archipelago.

Such was the substance of the narrative which the Professor gave with sundry repetitions and digressions ; while he was giving it, he frequently paused and frowned as if irritated in a way that seemed by no means justified by the patient and good-humoured demeanour of his audience.

"But now, gentlemen," added the Professor, "I must tell you something more. Important changes have resulted from the collision ; the cardinal points have been displaced ; gravity has been diminished : not that I ever supposed for a minute, as you did, that I was still upon the earth. No ! the earth, attended by her moon, continued to rotate along her proper orbit. But we, gentlemen, have nothing to complain of ; our destiny might have been far worse ; we might all have been crushed to death, or the comet might have remained in adhesion to the earth ; and in neither of these cases should we have had the satisfaction of making this marvellous excursion through untraversed solar regions. No, gentlemen, I repeat it, we have nothing to regret."

And as the Professor spoke, he seemed to kindle with the emotion of such supreme contentment that no one had the heart to gainsay his assertion. Ben Zoof alone ventured an unlucky remark to the effect that if the comet had happened to strike against Montmartre, instead of a bit of Africa, it would have met with some resistance.

"Pshaw !" said Rosette, disdainfully. "A mole-hill like Montmartre would have been ground to powder in a moment."

"Mole-hill !" exclaimed Ben Zoof, stung to the quick. "I can tell you it would have caught up your bit of a comet and worn it like a feather in a cap."

The Professor looked angry, and Servadac having imposed silence upon his orderly, explained the worthy

soldier's sensitiveness on all that concerned Montmartre. Always obedient to his master, Ben Zoof held his tongue ; but he felt that he could never forgive the slight that had been cast upon his beloved home.

It was now all-important to learn whether the astronomer had been able to continue his observations, and whether he had learned sufficient of Gallia's path through space to make him competent to determine, at least approximately, the period of its revolution round the sun. With as much tact and caution as he could, Lieutenant Procope endeavoured to intimate the general desire for some information on this point.

"Before the shock, sir," answered the professor, "I had conclusively demonstrated the path of the comet ; but, in consequence of the modifications which that shock has entailed upon my comet's orbit, I have been compelled entirely to recommence my calculations."

The lieutenant looked disappointed.

"Although the orbit of the earth was unaltered," continued the Professor, "the result of the collision was the projection of the comet into a new orbit altogether."

"And may I ask," said Procope, deferentially, "whether you have got the elements of the fresh orbit ?"

"Yes."

"Then perhaps you know . . ."

"I know this, sir, that at 47 min. 35.6 sec. after two o'clock on the morning of the 1st of January last, Gallia, in passing its ascending node, came in contact with the earth ; that on the 10th of January it crossed the orbit of Venus ; that it reached its perihelion on the 15th ; that it re-crossed the orbit of Venus ; that on the 1st of February it passed its descending node ; on the 13th crossed the orbit of Mars ; entered the zone of the telescopic planets on the 10th of March, and, attracting Nerina, carried it off as a satellite."

Servadac interposed :

"We are already acquainted with well-nigh all these

extraordinary facts ; many of them, moreover, we have learned from documents which we have picked up, and which, although unsigned, we cannot entertain a doubt have originated with you."

Professor Rosette drew himself up proudly and said :

"Of course they originated with me. I sent them off by hundreds. From whom else could they come ? "

"From no-one but yourself, certainly," rejoined the Count, with grave politeness.

Hitherto the conversation had thrown no light upon the future movements of Gallia, and Rosette was disposed apparently to evade, or at least to postpone, the subject. When, therefore, Lieutenant Procope was about to press his inquiries in a more categorical form, Servadac, thinking it advisable not prematurely to press the little *savant* too far, interrupted him by asking the Professor how he accounted for the earth having suffered so little from such a formidable concussion.

"I account for it in this way," answered Rosette : "the earth was travelling at the rate of 28,000 leagues an hour, and Gallia at the rate of 57,000 leagues an hour, therefore the result was the same as though a train rushing along at a speed of about 86,000 leagues an hour had suddenly encountered some obstacle. The nucleus of the comet, being excessively hard, has done exactly what a ball would do fired with that velocity close to a pane of glass. It has crossed the earth without cracking it."

"It is possible you may be right," said Servadac, thoughtfully.

"Right ! of course I am right !" replied the snappish Professor. Soon, however, recovering his equanimity, he continued : "It is fortunate that the earth was only touched obliquely ; if the comet had impinged perpendicularly, it must have ploughed its way deep below the surface, and the disasters it might have caused are beyond reckoning. Perhaps," he added, with a smile, "even Montmartre might not have survived the calamity."

"Sir!" shouted Ben Zoof, quite unable to bear the unprovoked attack.

"Quiet, Ben Zoof!" said Servadac, sternly.

Fortunately for the sake of peace, Isaac Hakkabut, who at length was beginning to realise something of the true condition of things, came forward at this moment, and in a voice trembling with eagerness, implored the Professor to tell him when they would all be back again upon the earth.

"Are you in a great hurry?" asked the Professor, coolly.

The Jew was about to speak again, when Captain Servadac interposed:

"Allow me to say that, in somewhat more scientific terms, I was about to ask you the same question. Did I not understand you to say that, as the consequence of the collision, the character of the comet's orbit has been changed?"

"You did, sir."

"Did you imply that the orbit has ceased to be a parabola?"

"Just so."

"Is it then an hyperbola? and are we to be carried on far and away into remote distance, and never, never to return?"

"I did not say an hyperbola."

"And is it not?"

"It is not."

"Then it must be an ellipse?"

"Yes."

"And does its plane coincide with the plane of the earth?"

"Yes."

"Then it must be a periodic comet?"

"It is."

Servadac involuntarily raised a ringing shout of joy that echoed again along the gallery.

"Yes," continued the Professor, "Gallia is a periodic comet, and, allowing for the perturbations to which it is liable from the attraction of Mars and Jupiter and Saturn, it will return to the earth again in two years precisely."

"You mean that in two years after the first shock, Gallia will meet the earth at the same point as they met before?" said Lieutenant Procope.

"I am afraid so," said Rosette.

"Why afraid?"

"Because we are doing exceedingly well as we are." The Professor stamped his foot upon the ground, by way of emphasis, and added, "If I had my will, Gallia should never return to the earth again!"

CHAPTER V

A REVISED CALENDAR

All previous hypotheses, then, were now forgotten in the presence of the one great fact that Gallia was a comet and gravitating through remote solar regions. Captain Servadac became aware that the huge disc that had been looming through the clouds after the shock was the form of the retreating earth, to the proximity of which the one high tide they had experienced was also to be attributed.

As to the fulfilment of the Professor's prediction of an ultimate return to the terrestrial sphere, that was a point on which it must be owned that the Captain, after the first flush of his excitement was over, was not without many misgivings.

The next day or two were spent in providing for the accommodation of the new comer. Fortunately his desires were very moderate; he seemed to live among the stars, and as long as he was well provided with coffee, he cared little for luxuries, and paid little or no regard to the ingenuity with which all the internal arrangements of

Nina's Hive had been devised. Anxious to show all proper respect to his former tutor, Servadac proposed to leave the most comfortable apartment of the place at his disposal ; but the Professor resolutely declined to occupy it, saying that what he required was a small chamber, no matter how small, provided that it was elevated and secluded, which he could use as an observatory and where he might prosecute his studies without disturbance. A general search was instituted, and before long they were lucky enough to find, about a hundred feet above the central grotto, a small recess or reduct hollowed as it were in the mountain-side, which would exactly answer their purpose. It contained room enough for a bed, a table, an arm-chair, a chest of drawers, and, what was of still more consequence, for the indispensable telescope. One small stream of lava, an off-shoot of the great torrent, sufficed to warm the apartment enough.

In these retired quarters the astronomer took up his abode. It was on all hands acknowledged to be advisable to let him go on entirely in his own way. His meals were taken to him at stated intervals ; he slept but little ; carried on his calculations by day, his observations by night, and very rarely made his appearance amongst the rest of the little community.

The cold now became very intense, the thermometer registering 30°C. below zero. The mercury, however, never exhibited any of those fluctuations that are ever and again to be observed in variable climates, but continued slowly and steadily to fall, and in all probability would continue to do so until it reached the normal temperature of the regions of outlying space.

This steady sinking of the mercury was accompanied by a complete stillness of the atmosphere ; the very air seemed to be congealed ; no particle of it stirred ; from zenith to horizon there was never a cloud ; neither were there any of the damp mists or dry fogs which so often extend over the polar regions of the earth ; the sky was always clear ;

the sun shone by day and the stars by night without causing any perceptible difference in the temperature.

These peculiar conditions rendered the cold endurable even in the open air. The cause of so many of the diseases that prove fatal to Arctic explorers resides in the cutting winds, unwholesome fogs, or terrible snow-drifts, which, by drying up, relaxing, or otherwise affecting the lungs, make them incapable of fulfilling their proper functions. But during periods of calm weather, when the air has been absolutely still, many polar navigators, well-clothed and properly fed, have been known to withstand a temperature when the spirit in the thermometer has fallen to 60° below zero. It was the experience of Parry upon Melville Island, of Kane beyond Lat. 81° N., and of Hall and the crew of the *Polaris*, that, however intense the cold, in the absence of the wind they could always brave its rigour.

Notwithstanding, then, the extreme lowness of the temperature, the little population found that they were able to move about in the open air with perfect immunity. The Governor-General made it his special care to see that his people were all well fed and warmly clad. Food was both wholesome and abundant, and besides the furs brought from the *Dobryna's* stores, fresh skins could very easily be procured and made up into wearing apparel. A daily course of out-door exercise was enforced upon every one : not even Pablo and Nina were exempted from the general rule ; the two children, muffled up in furs, looking like little Esquimeaux, skated along together, Pablo ever at his companion's side, ready to give her a helping hand whenever she was weary with the exertions of her recreation.

After his interview with the newly-arrived astronomer, Isaac Hakkabut slunk back again to his tartan. A change had come over his ideas ; he could no longer resist the conviction that he was indeed millions and millions of miles away from the earth, where he had carried on so

varied and remunerative a traffic. It might be imagined that this realisation of his true position would have led him to a better mind, and that, in some degree at least, he would have been induced to regard the few fellow-creatures with whom his lot had been so strangely cast, otherwise than as mere instruments to his own personal and pecuniary advantage ; but no—the desire of gain was too thoroughly ingrained into his hard nature ever to be eradicated, and, secure in his knowledge that he was under the protection of a French officer, who, except under the most urgent necessity, would not permit him to be molested in retaining his property, he determined to wait for some emergency to arise which should enable him to use his present situation for his own profit.

On the one hand, the Jew took it into account that although the chances of returning to the earth might be remote, yet from what he had heard from the Professor he could not believe that they were improbable ; on the other, he knew that a considerable sum of money, in English and Russian coinage, was in the possession of various members of the little colony, and this, though valueless now, would be worth as much as ever if the proper condition of things should be restored ; accordingly, he set his heart on getting all the monetary wealth of Gallia into his possession, and to do this he must sell his goods. But he would not sell them yet ; there might come a time when for many articles the supply would not be equal to the demand ; that would be the time for him ; by waiting he reckoned he should be able to transact some lucrative business.

Such in his solitude were old Isaac's cogitations, whilst the universal population of Nina's Hive were congratulating themselves upon being rid of his odious presence.

As already stated in the message brought by the carrier pigeon, the distance travelled by Gallia in April was 39,000,000 leagues, and at the end of the month she was 110,000,000 leagues from the sun. A diagram representing the elliptical orbit of the planet, accompanied by

an ephemeris made out in minute detail, had been drawn out by the professor. The curve was divided into twenty-four sections of unequal length, representing respectively the distance described in the twenty-four months of the Gallian year, the twelve former divisions, according to Kepler's law, gradually diminishing in length as they approached the point denoting the aphelion and increasing as they neared the perihelion.

It was on the 12th of May that Rosette exhibited this result of his labours to Servadac, the Count, and the Lieutenant, who visited his apartment and naturally examined the drawing with the keenest interest. Gallia's path, extending beyond the orbit of Jupiter, lay clearly defined before their eyes, the progress along the orbit and the solar distances being inserted for each month separately. Nothing could look plainer, and if the Professor's calculations were correct (a point upon which they dared not, if they would, express the semblance of a doubt), Gallia would accomplish her revolution in precisely two years, and would meet the earth, which would in the same period of time had completed two annual revolutions, in the very same spot as before. What would be the consequences of a second collision they scarcely ventured to think.

Without lifting his eye from the diagram, which he was still carefully scrutinising, Servadac said :

"I see that during the month of May, Gallia will only travel 30,400,000 leagues, and that this will leave her about 140,000,000 leagues distant from the sun."

"Just so," replied the Professor.

"Then we have already passed the zone of the telescopic planets, have we not?" asked the Count.

"Can you not use your eyes?" said the Professor, testily. "If you will look you will see the zone marked clearly enough upon the map."

Without noticing the interruption, Servadac continued his own remarks :

"The comet then, I see, is to reach its aphelion on the

15th of January, exactly a twelvemonth after passing its perihelion."

"A twelvemonth ! Not a Gallian twelvemonth ?" exclaimed Rosette.

Servadac looked bewildered. Lieutenant Procope could not suppress a smile.

"What are you laughing at?" demanded the Professor, turning round upon him angrily.

"Nothing, sir ; only it amuses me to see how you want to revise the terrestrial calendar."

"I want to be logical, that's all."

"By all manner of means, my dear Professor, let us be logical."

"Well, then, listen to me," resumed the Professor, stiffly. "I presume you are taking it for granted that the Gallian year—by which I mean the time in which Gallia makes one revolution round the sun—is equal in length to two terrestrial years."

They signified their assent.

"And that year, like every other year, ought to be divided into twelve months."

"Yes, certainly, if you wish it," said the Captain, acquiescing.

"If I wish it !" exclaimed Rosette. "Nothing of the sort ! Of course a year must have twelve months !"

"Of course," said the Captain.

"And how many days will make a month ?" asked the Professor.

"I suppose sixty or sixty-two, as the case may be. The days now are only half as long as they used to be," answered the Captain.

"Servadac, don't be thoughtless !" cried Rosette, with all the petulant impatience of the old pedagogue. "If the days are only half as long as they were, sixty of them cannot make up a twelfth part of Gallia's year—cannot be a month."

"I suppose not," replied the confused Captain.

"Do you not see, then," continued the astronomer, "that

if a Gallian month is twice as long as a terrestrial month, and a Gallian day is only half as long as a terrestrial day, there must be a hundred and twenty days in every month ? ”

“ No doubt you are right, Professor,” said Count Timascheff ; “ but do you not think that the use of a new calendar such as this would practically be very troublesome ? ”

“ Not at all ! not at all ! I do not intend to use any other,” was the Professor’s bluff reply.

After pondering for a few moments, the Captain spoke again :

“ According, then, to this new calendar, it isn’t the middle of May at all ; it must now be some time in March.”

“ Yes,” said the Professor, “ to-day is the 26th of March. It is the 266th day of the Gallian year. It corresponds with the 133rd day of the terrestrial year. You are quite correct, it is the 26th of March.”

“ Strange ! ” muttered Servadac.

“ And a month, a terrestrial month, thirty old days, sixty new days hence, it will be the 86th of March.”

“ Ha, ha ! ” roared the Captain ; “ this is logic with a vengeance ! ”

The old professor had an undefined consciousness that his former pupil was laughing at him ; and as it was growing late, he made an excuse that he had no more leisure. The visitors accordingly quitted the observatory.

It must be owned that the revised calendar was left to the Professor’s sole use, and the colony was fairly puzzled whenever he referred to such unheard-of dates as the 47th of April or the 118th of May.

According to the old calendar, June had now arrived ; and by the professor’s tables Gallia during the month would have advanced 27,500,000 leagues further along its orbit, and would have attained a distance of 155,000,000 leagues from the sun. The thermometer continued to fall ; the atmosphere remained clear as heretofore. The population performed their daily avocations with systematic routine ; and almost the only thing that broke the monotony

of existence was an occasional visit from the blustering, nervous, little professor, when some sudden fancy induced him to throw aside his astronomical studies for a time, and pay a visit to the common hall. His arrival there was generally hailed as the precursor of a little season of excitement. Somehow or other the conversation would eventually work its way round to the topic of a future collision between the comet and the earth ; and in the same degree as this was a matter of sanguine anticipation to Captain Servadac and his friends, it was a matter of aversion to the astronomical enthusiast, who had no desire to quit his present quarters in a sphere, which, being of his own discovery, he could hardly have cared for more if it had been of his own creation. The interview would often terminate in a scene of considerable animation.

On the 27th of June (old calendar) the Professor burst like a cannon-ball into the central hall, where they were all assembled, and without a word of salutation or of preface, accosted the Lieutenant in the way in which in earlier days he had been accustomed to speak to an idle school-boy :

" Now, Lieutenant ! no evasions ! no shufflings ! Tell me, have you or have you not circumnavigated Gallia ? "

The Lieutenant drew himself up stiffly.

" Evasions ! shufflings ! I am not accustomed, sir . . . " he began in a tone evidencing no little resentment ; but catching a hint from the Count he subdued his voice, and simply said, " We have."

" And may I ask," continued the professor, quite unaware of the previous discourtesy, " whether, when you made your voyage, you took any account of distances ? "

" As approximately as I could," replied the Lieutenant ; " I did what I could by log and compass. I was unable to take the altitude of sun or star."

" At what result did you arrive ? What is the measurement of our equator ? "

" I estimate the total circumference of the equator to be about 1,400 miles."

“ Ah ! ” said the Professor, more than half speaking to himself, “ a circumference of 1,400 miles would give a diameter of about 450 miles. That would be approximately about one-sixteenth of the diameter of the earth.”

Raising his voice, he continued :

“ Gentlemen, in order to complete my account of my comet Gallia, I require to know its area, its mass, its volume, its density, its specific gravity.”

“ Since we know the diameter,” remarked the Lieutenant, “ there can be no difficulty in finding its surface and its volume.”

“ And did I say there was any difficulty ? ” asked the Professor, fiercely. “ I have been able to reckon that ever since I was born.”

“ Cock-a-doodle-doo ! ” cried Ben Zoof, delighted at any opportunity of paying off his old grudge.

The Professor looked at him, but did not vouchsafe a word. Addressing the Captain, he said :

“ Now, Servadac, take your paper and a pen, and find me the surface of Gallia.”

With more submission than when he was a schoolboy, the Captain sat down and endeavoured to recall the proper formula.

“ The surface of a sphere ? Multiply circumference by diameter.”

“ Right ! ” cried Rosette ; “ but it ought to be done by this time.”

“ Circumference, 1,400 ; diameter, 450 ; area of surface, 630,000,” read the Captain.

“ True,” replied Rosette, “ 630,000 square miles ; just 292 times less than that of the earth.”

“ Pretty little comet ! nice little comet ! ” muttered Ben Zoof.

The astronomer bit his lip, frowned, snorted, and cast at him a withering look, but did not take any further notice.

“ Now, Captain Servadac,” said the Professor, “ take your

pen again, if you please, and find me the volume of Gallia."

The Captain hesitated.

"Quick, quick!" cried the Professor, impatiently; "surely you have not forgotten how to find the volume of a sphere!"

"A moment's breathing time, please."

"Breathing time, indeed! A mathematician should not want breathing time! Come, multiply the surface by the third of the radius. Don't you recollect?"

Captain Servadac applied himself to his task while the by-standers waited, with some difficulty suppressing their inclination to laugh. There was a short silence, at the end of which Servadac announced that the volume of the comet was 47,880,000 cubic miles.

"Just about 5,000 times less than the earth," observed the Lieutenant.

"Nice little comet! pretty little comet!" again said Ben Zoof.

The Professor scowled at him, and was manifestly annoyed at having the insignificant dimensions of his comet pointed out in so disparaging a manner. Lieutenant Procope further remarked that from the earth he supposed it to be about as conspicuous as a star of the seventh magnitude, and would require a good telescope to see it.

"Ha, ha!" laughed the orderly, aloud; "charming little comet! so pretty! and so modest!"

"You rascal!" roared the Professor, and clenched his hand in passion, as if about to strike him. Ben Zoof laughed the more, and was on the point of repeating his satirical comments, when a stern order from the Captain made him hold his tongue. The truth was that the Professor was just as sensitive about his comet as the orderly was about Montmartre, and if the contention between the two had been allowed to go on unchecked, it is impossible to say what serious quarrel might not have arisen.

When Professor Rosette's equanimity had been restored, he said:

"Thus, then, gentlemen, the diameter, the surface, the volume of my comet are settled ; but there is more to be done. I shall not be satisfied until, by actual measurement, I have determined its mass, its density, and the force of gravity at its surface."

"A laborious problem," remarked Count Timascheff.

"Laborious or not, it has to be accomplished. I am resolved to find out what my comet weighs."

"Would it not be of some assistance, if we knew of what substance it is composed ?" asked the Lieutenant.

"That is of no moment at all," replied the Professor ; "the problem is independent of it."

"Then we await your orders," was the Captain's reply.

"You must understand, however," said Rosette, "that there are various preliminary calculations to be made ; you will have to wait till they are finished."

"As long as you please," said the Count.

"No hurry at all," observed the Captain, who was not in the least impatient to continue his mathematical exercises.

"Then, gentlemen," said the astronomer, "with your leave we will for this purpose make an appointment a few weeks hence. What do you say to the 62nd of April ?"

Without noticing the general smile which the novel date provoked, the astronomer left the hall, and retired to his observatory.

CHAPTER VI

WANTED : A STEELYARD

Under the still diminishing influence of the sun's attraction, but without let or hindrance, Gallia continued its inter-planetary course, accompanied by Nerina, its captured satellite, which performed its fortnightly revolutions with unvarying regularity.

Meanwhile, the question beyond all others important was ever recurring to the minds of Servadac and his two

companions : were the astronomer's calculations correct, and was there a sound foundation for his prediction that the comet would again touch the earth? But whatever might be their doubts or anxieties, they were fain to keep all their misgivings to themselves ; the Professor was of a temper far too cross-grained for them to venture to ask him to revise or re-examine the results of his observations.

The rest of the community by no means shared in their uneasiness. Negrete and his fellow-countrymen yielded to their destiny with philosophical indifference. Happier and better provided for than they had ever been in their lives, it did not give them a passing thought, far less cause any serious concern, whether they were still circling round the sun, or whether they were being carried right away within the limits of another system. Utterly careless of the future, the majos, light-hearted as ever, carolled out their favourite songs, just as if they had never quitted the shores of their native land.

Happiest of all were Pablo and Nina. Racing through the galleries of the Hive, clambering over the rocks upon the shore, one day skating far away across the frozen ocean, the next fishing in the lake that was kept liquid by the heat of the lava-torrent, the two children led a life of perpetual enjoyment. Nor was their recreation allowed to interfere with their studies. Captain Servadac, who in common with the Count really liked them both, conceived that the responsibilities of a parent in some degree had devolved upon him, and took great care in superintending their daily lessons, which he succeeded in making hardly less pleasant than their sports.

Indulged and loved by all, it was little wonder that young Pablo had no longing for the scorching plains of Andalusia, or that little Nina had lost all wish to return with her pet goat to the barren rocks of Sardinia. They had now a home in which they had nothing to desire.

"Have you no father nor mother?" asked Pablo, one day.

"No," she answered.

"No more have I," said the boy. "I used to run along by the side of the diligences when I was in Spain."

"I used to look after goats at Madalena," said Nina ; "but it is much nicer here—I am so happy here. I have you for a brother, and everybody is so kind. I am afraid they will spoil us, Pablo," she added, smiling.

"Oh, no, Nina ; you are too good to be spoiled, and when I am with you, you make me good too," said Pablo, gravely.

July had now arrived. During the month Gallia's advance along its orbit would be reduced to 22,000,000 leagues, the distance from the sun at the end being 172,000,000 leagues, about four and a half times as great as the average distance of the earth from the sun. It was travelling now at about the same speed as the earth, which traverses the ecliptic at a rate of 21,000,000 leagues a month, or 28,800 leagues an hour.

In due time the 62nd April, according to the revised Gallian calendar, dawned ; and in punctual fulfilment of the Professor's appointment, a note was delivered to Servadac to say that he was ready, and hoped that day to commence operations for calculating the mass and density of his comet, as well as the force of gravity at its surface.

A point of far greater interest to Captain Servadac and his friends would have been to ascertain the nature of the substance of which the comet was composed, but they felt pledged to render the Professor any aid they could in the researches upon which he had set his heart. Without delay, therefore, they assembled in the central hall, where they were very soon joined by Rosette, who seemed to be in fairly good temper.

"Gentlemen," he began, "I propose to-day to endeavour to complete our observations of the elements of my comet. Three matters of investigation are before us. First, the measure of gravity at its surface ; this attractive force we know, by the increase of our own muscular force, must of course be considerably less than that at the surface of the

earth. Secondly, its mass, that is, the quantity of its matter. And thirdly, its density or quantity of matter in a unit of its volume. We will proceed, gentlemen, if you please, to weigh Gallia."

Ben Zoof, who had just entered the hall, caught the Professor's last sentence, and without saying a word, went out again and was absent for some minutes. When he returned, he said :

"If you want to weigh this comet of yours, I suppose you want a pair of scales ; but I have been to look, and I cannot find a pair anywhere. And what's more," he added mischievously, "you won't get them anywhere."

A frown came over the Professor's countenance. Servadac saw it, and gave his orderly a sign that he should desist entirely from his bantering.

"I require, gentlemen," resumed Rosette, "first of all to know by how much the weight of a kilogramme here differs from its weight upon the earth¹ ; the attraction, as we have said, being less, the weight will be proportionately less also."

"Then an ordinary pair of scales, being under the influence of attraction, I suppose, would not answer your purpose," submitted the Lieutenant.

"And the very kilogramme weight you used would have become lighter," put in the Count, deferentially.

"Pray, gentlemen, do not interrupt me," said the Professor, authoritatively, as if *ex cathedrâ*. "I need no instruction on these points."

Procope and Timascheff demurely bowed their heads. The Professor resumed :

"Upon a steelyard, or spring-balance, dependent upon mere tension or flexibility, the attraction will have no influence. If I suspend a weight equivalent to the weight of a kilogramme, the index will register the proper weight on the surface of Gallia. Thus I shall arrive at the difference I want : the difference between the earth's attraction and

¹ 2.2 lbs. avoirdupois.

the comet's. Will you, therefore, have the goodness to provide me at once with a steelyard and a tested kilogramme."

The audience looked at one another, and then at Ben Zoof, who was thoroughly acquainted with all the resources of the colony.

"We have neither one nor the other," said the orderly.

The Professor stamped with vexation.

"I believe old Hakkabut has a steelyard on board his tartan," said Ben Zoof, presently.

"Then why didn't you say so before, you idiot?" roared the excitable little man.

Anxious to pacify him, Servadac assured him that every exertion should be made to procure the instrument, and directed Ben Zoof to go to the Jew and borrow it.

"No, stop a moment," he said, as Ben Zoof was moving away on his errand; "perhaps I had better go with you myself; the old Jew may make a difficulty about lending us any of his property."

"Why should we not all go?" asked the Count; "we should see what kind of a life the misanthrope leads on board the *Hansa*."

The proposal met with general approbation.

Before they started, Professor Rosette requested that one of the men might be ordered to cut him a cubic decimetre out of the solid substance of Gallia.¹

"My engineer is the man for that," said the Count; "he will do it well for you if you will give him the precise measurement."

"What! you don't mean," exclaimed the Professor, again going off into a passion, "that you haven't a proper measure of length?"

Ben Zoof was sent off to ransack the stores for the article in question, but no measure was forthcoming.

"Most likely we shall find one on board the tartan," said the orderly.

¹ A decimetre = 3.93 inches; a cubic decimetre, therefore $(3.93)^3 = 60$ cubic inches, nearly.

"Then let us lose no time in trying," answered the Professor, as he hustled with hasty strides into the gallery.

The rest of the party followed, and were soon in the open air upon the rocks that overhung the shore. They descended to the level of the frozen water and made their way along its edge towards the little creek where the *Dobryna* and the *Hansa* lay firmly imprisoned in their icy bonds.

The temperature was low beyond previous experience ; but well muffled up in fur, they all endured it without much actual suffering. Their breath issued in vapour, which was at once congealed into little crystals upon their whiskers, beards, eyebrows, and eyelashes, until their faces, covered with countless snow-white prickles, were truly ludicrous. The little Professor, most comical of all, resembled nothing so much as the cub of an Arctic bear.

It was eight o'clock in the morning. The sun was rapidly approaching the zenith ; but its disc, from the extreme remoteness, was proportionately dwarfed ; its beams being all but destitute of their proper warmth and radiance. The volcano to its very summit and the surrounding rocks were still covered with the unsullied mantle of snow that had fallen while the atmosphere was still to some extent charged with vapour ; but on the north side the snow had given place to the cascade of fiery lava, which, making its way down the sloping rocks as far as the vaulted opening of the central cavern, fell thence perpendicularly into the sea.

Above the cavern, 150 feet up the mountain, was a dark hole, above which the stream of lava made a bifurcation in its course. From this hole projected the case of an astronomer's telescope ; it was the opening of Palmyrin Rosette's observatory.

Sea and land seemed blended into one dreary whiteness, to which the pale blue sky offered scarcely any contrast. The shore was indented with the marks of many footsteps left by the colonists either on their way to collect ice for drinking purposes, or as the result of their skating expeditions ; the edges of the skates had cut out a labyrinth of

curves complicated as the figure traced by aquatic insects upon the surface of a pool.

Across the quarter of a mile of level ground that lay between the mountain and the creek, a series of footprints, frozen hard into the snow, marked the course taken by Isaac Hakkabut on his last return from Nina's Hive.

On approaching the creek, Lieutenant Procope drew his companions' attention to the elevation of the *Dobryna's* and *Hansa's* waterline, both vessels being now some fifteen feet above the level of the sea.

"What a strange phenomenon!" exclaimed the Captain.

"It makes me very uneasy," rejoined the Lieutenant; "in shallow places like this, as the crust of ice thickens, it forces everything upwards with irresistible force."

"But surely this process of congelation must have a limit!" said the Count.

"But who can say what that limit will be? Remember that we have not yet reached our maximum of cold," replied Procope.

"Indeed, I hope not!" exclaimed the Professor; "where would be the use of our travelling 200,000,000 leagues from the sun, if we are only to experience the same temperature as we should find at the poles of the earth?"

"Fortunately for us, however, Professor," said the Lieutenant, with a smile, "the temperature of the remotest space never descends beyond 70° below zero."

"And as long as there is no wind," added Servadac, "we may pass comfortably through the winter, without a single attack of catarrh."

Lieutenant Procope proceeded to impart to the Count his anxiety about the situation of his yacht. He pointed out that by the constant superposition of new deposits of ice, the vessel would be elevated to a great height, and consequently in the event of a thaw, it must be exposed to a calamity similar to those which in polar seas cause destruction to so many whalers.

There was no time now for concerting measures off-hand

to prevent the disaster, for the other members of the party had already reached the spot where the *Hansa* lay bound in her icy trammels. A flight of steps, recently hewn by Hakkabut himself, gave access for the present to the gangway, but it was evident that some different contrivance would have to be resorted to when the tartan should be elevated perhaps to a hundred feet.

A thin curl of blue smoke issued from the copper funnel that projected above the mass of snow which had accumulated upon the deck of the *Hansa*. The owner was sparing of his fuel, and it was only the non-conducting layer of ice enveloping the tartan that rendered the internal temperature endurable.

"Hi ! old Nebuchadnezzar, where are you ?" shouted Ben Zoof, at the full strength of his lungs.

At the sound of his voice, the cabin door opened, and the Jew's head and shoulders protruded on to the deck.

CHAPTER VII

MONEY AT A PREMIUM

"Who's there ? I have nothing here for anyone. Go away !" Such was the inhospitable greeting with which Isaac Hakkabut received his visitors.

"Hakkabut ! do you take us for thieves ?" asked Servadac, in tones of stern displeasure.

"Oh, your Excellency, my lord, I did not know that it was you," whined the Jew, but without emerging any further from his cabin.

"Now, old Hakkabut, come out of your shell ! Come and show the Governor proper respect, when he gives you the honour of his company," cried Ben Zoof, who by this time had clambered on to the deck.

After considerable hesitation, but still keeping his hold upon the cabin-door, the Jew made up his mind to step outside.

"What do you want?" he inquired, timorously.

"I want a word with you," said Servadac, "but I do not want to stand talking out here in the cold."

Followed by the rest of the party, he proceeded to mount the steps.

The Jew trembled from head to foot.

"But I cannot let you into my cabin. I am a poor man; I have nothing to give you," he moaned, piteously.

"Here he is!" laughed Ben Zoof, contemptuously; "he is beginning his chapter of lamentations over again. But standing out here will never do. Out of the way, old Hakkabut, I say! out of the way!" and, without more ado, he thrust the astonished Jew on one side and opened the door of the cabin.

Servadac, however, declined to enter until he had taken the pains to explain to the owner of the tartan that he had no intention of laying violent hands upon his property, and that if the time should ever come that his cargo was in requisition for the common use, he should receive a proper price for his goods, the same as he would in Europe.

"Europe, indeed!" muttered the Jew, maliciously, between his teeth. "European prices will not do for me. I must have Gallian prices—and of my own fixing, too!"

So large a portion of the vessel had been appropriated to the cargo that the space reserved for the cabin was of most meagre dimensions. In one corner of the compartment stood a small iron stove, in which smouldered a bare handful of coals; in another was a trestle-board which served as a bed; two or three stools and a rickety deal table, together with a few cooking utensils, completed a stock of furniture which was worthy of its proprietor.

On entering the cabin, Ben Zoof's first proceeding was to throw on the fire a liberal supply of coals, utterly regardless of the groans of poor Isaac, who would almost as soon have parted with his own bones as submit to such reckless expenditure of his fuel. The perishing temperature

of the cabin, however, was sufficient justification for the orderly's conduct, and by a little skilful manipulation he soon succeeded in getting up a tolerable fire.

The visitors having taken what seats they could, Hakkabut closed the door, and, like a prisoner awaiting his sentence, stood with folded hands, expecting the Captain to speak.

"Listen to me," said Servadac ; "we have come to ask a favour of you."

Imagining that at least half of his property was to be confiscated, the Jew began to break out into his usual formula about being a poor man and having nothing to spare ; but Servadac, without taking any heed of his complainings, went on :

"We are not going to ruin you, you know."

Hakkabut looked keenly into the Captain's face.

"We have only come to know whether you can lend us a steelyard."

So far from showing any symptom of relief, the old miser exclaimed, with a stare of astonishment, as if he had been asked for the loan of some thousand francs :

"A steelyard ?"

"Yes !" echoed the Professor, impatiently ; "a steelyard."

"Have you not one ?" asked Servadac.

"To be sure he has !" said Ben Zoof.

Old Isaac stammered and stuttered, but at last confessed that perhaps there might be one amongst the stores.

"Then, surely, you will not object to lend it to us ?" said the Captain.

"Only for one day," added the Professor.

The Jew stammered again, and began to object.

"It is a very delicate instrument, your Excellency. The cold, you know, the cold may do injury to the spring ; and perhaps you are going to use it to weigh something very heavy."

"Why, old Ephraim, do you suppose we are going to weigh a mountain with it?" said Ben Zoof.

"Better than that!" cried out the Professor, triumphantly; "we are going to weigh Gallia with it; my comet."

"Merciful heaven!" shrieked Isaac, feigning consternation at the bare suggestion.

Servadac knew well enough that the Jew was holding out only for a good bargain, and assured him that the steelyard was required for no other purpose than to weigh a kilogramme, which (considering how much lighter everything had become) could not possibly put the slightest strain upon the instrument.

The Jew still spluttered, and moaned, and hesitated.

"Well, then," said Servadac, "if you do not like to lend us your steelyard, do you object to sell it to us?"

Isaac fairly shrieked aloud.

"God of Israel!" he ejaculated, "sell my steelyard? Would you deprive me of one of the most indispensable of my means of livelihood? How should I weigh my merchandise without my steelyard—my solitary steelyard, so delicate and so correct?"

The orderly wondered how his master could refrain from strangling the old miser upon the spot; but Servadac, rather amused than otherwise, determined to try another form of persuasion.

"Come, Hakkabut, I see that you are not disposed either to lend or to sell your steelyard. What do you say to letting us hire it?"

The Jew's eyes twinkled with a satisfaction that he was unable to conceal.

"But what security would you give? The instrument is very valuable"; and he looked more cunning than ever.

"What is it worth? if it is worth twenty francs, I will leave a deposit of a hundred. Will that satisfy you?"

He shook his head doubtfully.

"It is very little; indeed, it is too little, your Excellency.

Consider, it is the only steelyard in all this new world of ours. It is worth more, much more. If I take your deposit it must be in gold—all gold. But how much do you agree to give me for the hire—the hire, one day ? ”

“ You shall have twenty francs,” said Servadac.

“ Oh, it is dirt cheap ; but never mind, for one day, you shall have it. Deposit in gold money a hundred francs, and twenty francs for the hire.”

The old man folded his hands in meek resignation.

“ The fellow knows how to make a good bargain,” said Servadac, as Isaac, after casting a distrustful look around, went out of the cabin.

“ Detestable old wretch ! ” replied the Count, full of disgust.

Hardly a minute elapsed before the Jew was back again, carrying his precious steelyard with ostentatious care. It was of an ordinary kind. A spring balance, fitted with a hook, held the article to be weighed ; a pointer, revolving on a disc, indicated the weight of the article. Professor Rosette was manifestly right in asserting that such a machine would register results quite independently of any change in the force of attraction. On the earth it would have registered a kilogramme as a kilogramme ; here it recorded a different value altogether, as the result of the altered force of gravity.

Gold coinage to the value of one hundred and twenty francs was handed over to the Jew, who clutched at the money with unmistakable eagerness. The steelyard was committed to the keeping of Ben Zoof, and the visitors prepared to quit the *Hansa*.

All at once it occurred to the Professor that the steelyard would be absolutely useless to him, unless he had the means for ascertaining the precise measurement of the unit of the soil of Gallia which he proposed to weigh.

“ Something more you must lend me,” he said, addressing the Jew.

Hakkabut started.

"I must have a measure, and I must have a kilogramme."

"I have neither of them," answered Isaac. "I have neither the rule nor the weight. I am sorry ; I am very sorry."

And this time the old Jew spoke the truth. He would have been really glad to do another stroke or two of business upon terms as advantageous as the transaction he had just concluded.

Palmyrin Rosette scratched his head in perplexity, glaring round upon his companions as if they were personally responsible for his annoyance. He muttered something about finding a way out of his difficulty, and hastily mounted the cabin-ladder. The rest followed, but they had hardly reached the deck when the chink of money was heard in the room below. Hakkabut was locking away the gold in one of the drawers.

Back again, down the ladder, scrambled the little Professor, and before the Jew was aware of his presence he had seized him by the tail of his slouchy overcoat.

"Some of your money ! I must have some money !" he said.

"Money !" gasped Hakkabut ; "I have no money."

He was pale with fright, and hardly knew what he was saying.

"Falsehood !" roared Rosette. "Do you think I cannot see ?"

And peering down into the drawer which the Jew was vainly trying to close, he cried :

"Heaps of money ! French money ! Five-franc pieces ! the very thing I want ! I must have them !"

The Captain and his friends, who had returned to the cabin, looked on with mingled amusement and bewilderment.

"They are mine !" shrieked Hakkabut.

"I will have them !" shouted the Professor.

"You shall kill me first !" bellowed the Jew.

"No, but I must!" persisted the Professor again.

It was manifestly time for Servadac to interfere.

"My dear Professor," he said, smiling, "allow me to settle this little matter for you."

"Ah! your Excellency," moaned the agitated Jew, "protect me! I am but a poor man——"

"None of that, Hakkabut. Hold your tongue."

And, turning to Rosette, the Captain said:

"If, sir, I understand right, you require some silver five-franc pieces for your operation?"

"Forty," said Rosette, surlily.

"Two hundred francs!" whined Hakkabut.

"Silence!" cried the Captain.

"I must have more than that," the Professor continued.

"I want ten two-franc pieces, and twenty half-francs."

"Let me see," said Servadac, "how much is that in all? Two hundred and thirty francs, is it not?"

"I dare say it is," answered the Professor.

"Count, may I ask you," continued Servadac, "to be security to the Jew for this loan to the Professor?"

"Loan!" cried the Jew, "do you mean only a loan?"

"Silence!" again shouted the Captain.

Count Timascheff, expressing his regret that his purse contained only paper money, begged to place it at Captain Servadac's disposal.

"No paper, no paper!" exclaimed Isaac. "Paper has no currency in Gallia."

"About as much as silver," coolly retorted the Count.

"I am a poor man," began the Jew.

"Now, Hakkabut, stop these miserable lamentations of yours, once for all. Hand us over two hundred and thirty francs in silver money, or we will proceed to help ourselves."

Isaac began to yell with all his might: "Thieves! thieves!"

In a moment Ben Zoof's hand was clasped tightly over his mouth.

“ Stop that howling, Belshazzar ! ”

“ Let him alone, Ben Zoof. He will soon come to his senses,” said Servadac, quietly.

When the old Jew had recovered himself, the Captain addressed him :

“ Now, tell us, what interest do you expect ? ”

Nothing could overcome the Jew’s anxiety to make another good bargain. He began :

“ Money is scarce, very scarce, you know——”

“ No more of this ! ” shouted Servadac. “ What interest, I say, what interest do you ask ? ”

Faltering and undecided still, the Jew went on :

“ Very scarce, you know. Ten francs a day, I think, would not be unreasonable, considering——”

The Count had no patience to allow him to finish what he was about to say. He flung down notes to the value of several roubles. With a greediness that could not be concealed, Hakkabut grasped them all. Paper, indeed, they were ; but the cunning Israelite knew that they would in any case be security far beyond the value of his cash. He was making some eighteen hundred per cent. interest, and accordingly chuckled within himself at his unexpected stroke of business.

The Professor pocketed his French coins with a satisfaction far more demonstrative.

“ Gentlemen,” he said, “ with these franc pieces I obtain the means of determining accurately both a metre and a kilogramme.”

CHAPTER VIII

GALLIA WEIGHED

A quarter of an hour later, the visitors to the *Hansa* had re-assembled in the common hall of Nina’s Hive.

“ Now, gentlemen, we can proceed,” said the Professor. “ May I request that this table may be cleared ? ”

Ben Zoof removed the various articles that were lying on the table, and the coins which had just been borrowed from the Jew were placed upon it in three piles, according to their value.

The Professor commenced :

“ Since none of you gentlemen, at the time of the shock, took the precaution to save either a metre measure or a kilogramme weight from the earth, and since both these articles are necessary for the calculation on which we are engaged, I have been obliged to devise means of my own to replace them.”

This exordium delivered, he paused and seemed to watch its effect upon his audience, who, however, were too well acquainted with the Professor's temper to make any attempt to exonerate themselves from the rebuke of carelessness, and submitted silently to the implied reproach.

“ I have taken pains,” he continued, “ to satisfy myself that these coins are in proper condition for my purpose. I find them unworn and unchipped ; indeed, they are almost new. They have been hoarded instead of circulated ; accordingly, they are fit to be utilised for my purpose of obtaining the precise length of a terrestrial metre.”¹

Ben Zoof looked on in perplexity, regarding the lecturer with much the same curiosity as he would have watched the performances of a travelling mountebank at a fair in Montmartre ; but Servadac and his two friends had already divined the Professor's meaning. They knew that French coinage is all decimal, the franc being the standard of which the other coins, whether gold, silver, or copper, are multiples or measures ; they knew, too, that the calibre or diameter of each piece of money is rigorously determined by law, and that the diameters of the silver coins representing five francs, two francs, and fifty centimes measure thirty-seven, twenty-seven, and eighteen millimetres² respectively ; and they accordingly guessed that Professor

¹ A metre = 39.371 inches.

² A millimetre = .03937 inch.

Rosette had conceived the plan of placing such a number of these coins in juxtaposition that the length of their united diameters should measure exactly the thousand millimetres that make up the terrestrial metre.

They had conjectured rightly. From the pile of forty five-franc pieces, Rosette took ten and spread them out lengthwise in a row upon the table ; to these he added the ten two-franc pieces and the twenty fifty-centimes.

"Now, gentlemen," he said, "here we have the measure of a metre exactly."

And, taking a scrap of paper, he put down rapidly a few figures, which he handed round for general inspection.

The little calculation was simple enough :

10	5-franc pieces, each	37	millimetres in diameter	=	.37	metre
10	2-franc	27	"	=	.27	"
20	50-centime	18	"	=	.36	"
						Total 1.00 metre

"I understand perfectly," said Servadac, when he had examined the paper ; "the straight line drawn through the centres of these coins represents a terrestrial metre."

"Precisely," replied the Professor.

"Dear me !" exclaimed Ben Zoof, in astonishment, "what a thing it is to be learned !"

"Not much learning wanted for that !" said the Professor, shrugging his shoulders contemptuously, as he made his marks on the table corresponding to the extremities of the line of money.

The measurement thus obtained was by means of a pair of compasses divided accurately into ten equal portions, or decimetres, each of course 3.93 inches long. A lath was then cut of this exact length and given to the engineer of the *Dobryna*, who was directed to cut out of the solid rock the cubic decimetre required by the Professor.

The next business was to obtain the precise weight of a kilogramme. This was by no means a difficult matter.

Not only the diameters, but also the weights, of the French coins are rigidly determined by law, and as the silver five-franc pieces always weigh exactly twenty-five grammes, the united weight of forty of these coins is known to amount to one kilogramme.¹

"Oh!" cried Ben Zoof; "to be able to do all this I say you must be rich as well as learned."

With a good-natured laugh at the orderly's remark, the meeting adjourned for a few hours.

By the appointed time the engineer had finished his task, and with all due care had prepared a cubic decimetre of the material of the comet.

"Now, gentlemen," said Professor Rosette, "we are in a position to complete our calculation; we can now arrive at Gallia's attraction, density, and mass."

Everyone gave him their complete attention.

"Before I proceed," he resumed, "I must recall to your minds Newton's general law, 'that the attraction of two bodies is directly proportional to the product of their masses, and inversely proportional to the square of their distances.'"

"Yes," said Servadac; "we remember that."

"Well, then," continued the Professor, "keep it in mind for a few minutes now. Look here! In this bag are forty five-franc pieces—together they weigh exactly a kilogramme; by which I mean that if we were on the earth,

¹ Appended is a table of the weights of various French coins:—

In gold: 100 francs weigh 32.25 grammes.

	50	"	"	16.12	"
	20	"	"	6.45	"
	10	"	"	3.22	"
	5	"	"	1.61	"
In silver:	5	"	"	25.00	"
	2	"	"	10.00	"
	1	"	"	5.00	"
	.5	"	"	2.50	"
In copper:	.1	"	"	10.00	"
	.05	"	"	5.00	"
	.02	"	"	2.00	"
	.01	"	"	1.00	"

and I were to hang the bag on the hook of the steel-yard, the indicator on the dial would register one kilogramme. This is clear enough, I suppose ? ”

As he spoke the Professor designedly kept his eyes fixed upon Ben Zoof. He was avowedly following the example of Arago, who was accustomed always in lecturing to watch the countenance of the least intelligent of his audience, and when he felt that he had made his meaning clear to him, he concluded that he must have succeeded with all the rest.¹ In this case, however, it was technical ignorance, rather than any lack of intelligence, that justified the selection of the orderly for this special attention.

Satisfied with his scrutiny of Ben Zoof's face, the Professor went on :

“ And now, gentlemen, we have to see what these coins weigh here upon Gallia.”

He suspended the money-bag to the hook ; the needle oscillated, and stopped.

“ Read it off ! ” he said.

The weight registered was one hundred and thirty-three grammes.

“ There, gentlemen, one hundred and thirty-three grammes ! Less than one-seventh of a kilogramme ! You see, consequently, that the force of gravity here on Gallia is not one-seventh of what it is upon the earth ! ”

“ Interesting ! ” cried Servadac, “ most interesting ! But let us go on and compute the mass.”

“ No, Captain, the density first,” said Rosette.

“ Certainly,” said the Lieutenant ; “ for, as we already know the volume, we can determine the mass as soon as we have ascertained the density.”

¹ On this subject an amusing anecdote is related by the illustrious astronomer himself. One day, just after he had been alluding to this as his usual habit, a young man entered the room, and feeling sure the lecturer knew him well, saluted him accordingly. “ I regret I have not the pleasure of your acquaintance,” said M. Arago. “ You surprise me,” replied the young student ; “ not only am I most regular in my attendance at your lectures, but you never take your eyes off me from the beginning to the end.”

The Professor took up the cube of rock.

"You know what this is," he went on to say. "You know, gentlemen, that this block is a cube hewn from the substance of which everywhere, all throughout your voyage of circumnavigation, you found Gallia to be composed—a substance to which your geological attainments did not suffice to assign a name."

"Our curiosity will be gratified," said Servadac, "if you will enlighten our ignorance."

But Rosette did not take the slightest notice of the interruption.

"A substance it is which no doubt constitutes the sole material of the comet, extending from its surface to its innermost depths. The probability is that it would be so ; your experience confirms that probability : you have found no trace of any other substance. Of this rock here is a solid decimetre ; let us get at its weight, and we shall have the key which will unlock the problem of the whole weight of Gallia. We have demonstrated that the force of attraction here is only one-seventh of what it is upon the earth, and shall consequently have to multiply the apparent weight of our cube by seven, in order to ascertain its proper weight. Do you understand me, goggle-eyes ? "

This was addressed to Ben Zoof, who was staring hard at him.

"No ! " said Ben Zoof.

"I thought not ; it is of no use waiting for your puzzle-brains to make it out. I must talk to those who *can* understand."

The Professor took the cube, and, on attaching it to the hook of the steelyard, found that its apparent weight was one kilogramme and four hundred and thirty grammes.

"Here it is, gentlemen ; one kilogramme, four hundred and thirty grammes. Multiply that by seven ; the product is, as nearly as possible, ten kilogrammes. What, therefore, is our conclusion ? Why, that the density of Gallia is just about double the density of the earth, which we know is

only five kilogrammes to a cubic decimetre. Had it not been for this greater density, the attraction of Gallia would only have been one-fifteenth instead of one-seventh of the terrestrial attraction."

The Professor could not refrain from exhibiting his gratification that, however inferior in volume, in density, at least, his comet had the advantage over the earth.

Nothing further now remained than to apply the investigations thus finished to the determining of the mass of weight. This was a matter of little labour.

Since a cubic decimetre of the hard substance of Gallia would weigh ten kilogrammes upon the earth, Gallia would weigh as many times ten kilogrammes as there were cubic decimetres in its volume. This volume was already known to be 211,432,460 cubic kilometres (*i.e.*, 47,880,000 cubic miles) or 211,432,460 millions of millions of cubic decimetres—a number expressed by 21 digits—and these would represent the number of kilogrammes in the mass of Gallia, which consequently weighed 4,788,566,540 millions of millions of kilogrammes less than the earth.

"And do you know how much the earth weighs?"¹ inquired Ben Zoof, almost losing his breath at these stupendous calculations.

"If I were to tell you, wiseacre, I do not suppose you would be much the wiser. Have you any idea of what is meant by a thousand millions?"

"Not much, I confess," said Ben Zoof.

"Well, then, if you owed a thousand million francs, eighteen or nineteen centuries ago, at the beginning of the Christian era, and had been paying a franc a minute ever since, you would not have got out of debt yet."

"No, that I shouldn't," answered the orderly; "a quarter of an hour of that fun would have ruined me. But really," he added, "I should like to hear how much the earth weighs."

"Five millions, eight hundred and seventy-five thousand

¹ The earth's weight is estimated at 6,000,000,000,000,000,000 tons.

trillions of kilogrammes—a number which is formed of twenty-six figures,” said Lieutenant Procope.

“And the moon?”

“Seventy thousand trillions of kilogrammes.”

“And the sun?” Ben Zoof went on.

“Two quintillions of kilogrammes—thirty-one figures,” answered the Professor.

“Ay,” said Ben Zoof, “I dare say you are right within a quarter of a gramme.”

The Professor frowned and looked angry, but the Captain diverted him by making a remark about the diminished force of gravity.

“Yes,” said Rosette; “our muscular force is seven times as great as it was. A man who used to be able to carry a couple of hundred-weight can here carry fourteen.”

“I suppose that accounts for our being able to jump so high,” observed Ben Zoof.

“And if Gallia had been lighter, Ben Zoof, you would have been able to jump higher still,” the Lieutenant said.

“Ay, perhaps even over Montmartre,” added the Professor, with a malicious twinkle in his eye.

The orderly winced under the retaliation.

“Let me see,” said the Captain; “what is the force of gravity upon the various planets?”

“You can’t mean, Servadac, that you have forgotten that? But you always were a disappointing pupil.”

The Captain could not help himself: he was forced to confess that his memory had failed him.

“Well, then,” said the Professor, “I must remind you. Taking the attraction on the earth as 1, that on Mercury is 1.15; on Venus it is .92, on Mars .5, and on Jupiter 2.45; on the moon the attraction is .16, whilst on the surface of the sun a terrestrial kilogramme would weigh 28 kilogrammes.”

“Therefore, if a man upon the surface of the sun were to fall down, he would have considerable difficulty in

getting up again. A cannon-ball, too, would only fly a few yards," said Lieutenant Procope.

"A jolly battlefield for cowards!" exclaimed Ben Zoof.

"Not so jolly, Ben Zoof, as you fancy," said his master; "the cowards would be too heavy to run away."

Ben Zoof ventured the remark that, as the smallness of Gallia secured to its inhabitants such an increase of strength and agility, he was almost sorry that it had not been a little smaller still.

"Though it could not anyhow have been very much smaller," he added, looking slyly at the Professor.

"Idiot!" exclaimed Rosette. "Your head is too light already; a puff of wind would blow it away."

"I must take care of my head, then, and hold it on," replied the irrepressible orderly.

Unable to get the last word, the Professor was about to retire, when Servadac detained him.

"Permit me to ask you one more question," he said. "Can you tell me what is the nature of the soil of Gallia?"

"Yes, I can answer that. And in this matter I do not think your impertinent orderly will venture to put Montmartre into the comparison. This soil is of a substance not unknown upon the earth." And speaking very slowly, the Professor said: "It contains 70 per cent. of tellurium, and 30 per cent. of gold."

Servadac uttered an exclamation of surprise.

"And the sum of the specific gravities of these two substances is 10, precisely the number that represents Gallia's density."

"A comet of gold!" ejaculated the Captain.

"Yes; a realisation of what the illustrious Maupertuis has already deemed probable," replied the astronomer.

"If Gallia, then, should ever become attached to the earth, might it not bring about an important revolution in all monetary affairs?" inquired the Count.

"No doubt about it!" said Rosette, with manifest

satisfaction. "It would supply the world with about 246,000 trillions of francs."

"It would make gold about as cheap as dirt, I suppose," said Servadac.

The last observation, however, was entirely lost upon the Professor, who had left the hall with an air almost majestic, and was already on his way to the observatory.

"And what, I wonder, is the use of all these big figures?" said Ben Zoof to his master, when next they were alone altogether.

"That's just the charm of them, my good fellow," was the Captain's cool reply, "that they are of no use whatever."

CHAPTER IX

JUPITER SOMEWHAT CLOSE

Except as to the time the comet would take to revolve round the sun, it must be confessed that all the Professor's calculations had comparatively little interest for any one but himself, and he was consequently left very much to pursue his studies in solitude.

The following day was the 1st of August, or, according to Rosette, the 63rd of April. In the course of this month Gallia would travel 16,500,000 leagues, attaining at the end a distance of 197,000,000 leagues from the sun. This would leave 81,000,000 leagues more to be traversed before reaching the aphelion of the 15th of January, after which it would begin once more to approach the sun.

But meanwhile, a marvellous world, never before so close within the range of human vision, was revealing itself. No wonder that Palmyrin Rosette cared so little to quit his observatory; for throughout those calm, clear Gallian nights, when the book of the firmament lay open before him, he could revel in a spectacle which no previous astronomer had ever been permitted to enjoy.

The glorious orb that was becoming so conspicuous an

object was none other than the planet Jupiter, the largest of all the bodies existing within the influence of solar attraction. During the seven months that had elapsed since its collision with the earth, the comet had been continuously approaching the planet, until the distance between them was scarcely more than 61,000,000 leagues, and this would go on diminishing until the 15th of October.

Under these circumstances, was it perfectly certain that no danger could accrue ? Was not Gallia, when its pathway led it into such close proximity to this enormous planet, running a risk of being attracted within its influence ? Might not that influence be altogether disastrous ? The Professor, it is true, in his estimate of the duration of his comet's revolution, had represented that he had made all proper allowances for any perturbations that would be caused either by Jupiter, by Saturn, or by Mars ; but what if there were any errors in his calculations ? what if there should be any elements of disturbance on which he had not reckoned ?

Speculations of this kind became more and more frequent, and Lieutenant Procope pointed out that the danger incurred might be of a fourfold character : first, that the comet, being irresistibly attracted, might be drawn on to the very surface of the planet, and there annihilated ; secondly, that, as the result of being brought under that attraction, it might be transformed into a satellite, or rather a sub-satellite, of that mighty world ; thirdly, that it might be diverted into a new orbit, which would never be coincident with the ecliptic ; or, lastly, its course might be so retarded that it would only reach the ecliptic too late to permit any junction with the earth. The occurrence of any one of these contingencies would be fatal to their hopes of re-union with the globe, from which they had been so strangely severed.

To Rosette, who, without family ties (which he had never found leisure or inclination to contract), had no shadow of desire to return to the earth, it would be only

the first of these probabilities that could give him any concern. Total annihilation might not accord with his views, but he would be quite content for Gallia to miss its mark with regard to the earth, indifferent whether it revolved as a new satellite around Jupiter, or whether it wended its course through the untraversed regions of the Milky Way.

The rest of the community, however, by no means sympathised with the Professor's sentiments, and the following month was a period of considerable doubt and anxiety.

On the 1st of September the distance between Gallia and Jupiter was precisely the same as the mean distance between the earth and the sun ; on the 16th, the distance was further reduced to 26,000,000 leagues. The planet began to assume enormous dimensions, and it almost seemed as if the comet had already been deflected from its elliptical orbit, and was rushing on in a straight line towards the overwhelming luminary.

The more they contemplated the character of this gigantic planet, the more they became impressed with the likelihood of a serious perturbation in their own course. The diameter of Jupiter is 85,390 miles, nearly eleven times as great as that of the earth ; his volume is 1,387 times, and his mass 300 times greater ; and although the mean density is only about a quarter of that of the earth, and only a third of that of water (whence it has been supposed that the superficies of Jupiter is liquid), yet his other proportions were large enough to warrant the apprehension that important disturbances might result from his proximity.

"I forget my astronomy, Lieutenant," said Servadac. "Tell me all you can about this formidable neighbour."

The Lieutenant having refreshed his memory by reference to Flammarion's "*Récits de l'Infini*," of which he had a Russian translation, and some other books, proceeded to recapitulate that Jupiter accomplishes his revolution

round the sun in 4,332 days, 14 hours, and 2 minutes ; that he travels at the rate of 467 miles a minute along an orbit measuring 2,976 millions of miles ; and that his rotation on his axis occupies only 9 hours and 55 minutes.

" His days, then, are shorter than ours ? " interrupted the Captain.

" Considerably," answered the Lieutenant, who went on to describe how the displacement of a point at the equator of Jupiter was twenty-seven times as rapid as on the earth, causing the polar compression to be about 2,378 miles ; how the axis, being nearly perpendicular, caused the days and nights to be nearly of the same length, and the seasons to be invariable ; and how the amount of light and heat received by the planet is only a twenty-fifth part of that received by the earth, the average distance from the sun being 475,693,000 miles.

" And how about these satellites ? Sometimes, I suppose, Jupiter has the benefit of four moons all shining at once ? " asked Servadac.

Of the satellites, Lieutenant Procope went on to say that one is rather smaller than our own moon ; that another moves round its primary at an interval about equal to the moon's distance from ourselves ; but that they all revolve in considerably less time : the first takes only 1 day, 18 hrs., 27 mins. ; the second takes 3 days, 13 hrs., 14 mins. ; the third, 7 days, 3 hrs., 42 mins. ; whilst the largest of all takes but 16 days, 16 hrs., 32 mins. The most remote revolves round the planet at a distance of 1,192,820 miles.

" They have been enlisted into the service of science," said Procope. " It is by their movements that the velocity of light has been calculated ; and they have been made available for the determination of terrestrial longitudes."

" It must be a wonderful sight," said the Captain.

" Yes," answered Procope. " I often think Jupiter is like a prodigious clock with four hands."

" I only hope that we are not destined to make a fifth hand," answered Servadac.

Such was the style of the conversation that was day by day reiterated during the whole month of suspense. Whatever topic might be started, it seemed soon to settle down upon the huge orb that was looming upon them with such threatening aspect.

Amongst other subjects that were started, the ages of the various planets were discussed.

"Let me read to you," said Lieutenant Procope, "a few lines from Flammarion."

And commencing at a passage he had marked, he began :

"The more remote that these planets are from the sun, the more venerable and advanced in formation are they found to be. Neptune, situated 2,746,271,000 miles from the sun, issued from the solar nebulosity, thousands of millions of centuries back. Uranus, revolving 1,753,851,000 miles from the centre of the planetary system, is of an age amounting to many hundred millions of centuries. Jupiter, the colossal planet, gravitating at a distance of 475,693,000 miles, may be reckoned as 70,000,000 centuries old. Mars has existed for 1,000,000,000 years at a distance of 139,212,000 miles. The earth 91,430,000 miles from the sun, quitted his burning bosom 100,000,000 years ago. Venus, revolving now 66,131,000 miles away, may be assigned the age of 50,000,000 years at least ; and Mercury, nearest of all, and youngest of all, has been revolving at a distance of 35,393,000 miles for the space of 10,000,000 years—the same time as the moon has been evolved from the earth."

Servadac listened attentively. He was at a loss what to say ; and the only reply he made to the recital of this novel theory was to the effect that, if it were true, he would prefer being captured by Mercury than by Jupiter, for Mercury, being so much the younger, would probably prove the less imperative and self-willed master.

It was on the 1st of September that the comet had crossed the orbit of Jupiter, and on the 1st of October the

two bodies were calculated to be at their minimum separation. No direct shock, however, could be apprehended ; the demonstration was sufficiently complete that the orbit of Gallia did not coincide with that of the planet, the orbit of Jupiter being inclined at an angle of $1^{\circ} 19'$ to the orbit of the earth, with which that of Gallia was, no doubt, coincident.

As the month of September verged towards its close, Jupiter began to wear an aspect that must have excited the admiration of the most ignorant or the most indifferent observer. Its salient points were illumined with novel and radiant tints, and the solar rays, reflected from its disc, glowed with a mingled softness and intensity upon Gallia, so that Nerina had to pale her beauty.

Who could wonder that Rosette, enthusiast as he was, should be irremovable from his observatory ? Who could expect otherwise than that, with the prospect before him of viewing the giant among planets, ten times nearer than any mortal eye had ever done, he should have begrudged every moment that distracted his attention ?

Meanwhile, as Jupiter grew large, the sun grew small.

From its increased remoteness the diameter of the sun's disc was diminished to $5' 46''$.

And what an increased interest began to be associated with the satellites ! They were visible to the naked eye ! Was it not a new record in the annals of science ?

Although it is acknowledged that they are not ordinarily visible on earth without the aid of a somewhat powerful telescope, it has been asserted that a favoured few, endued with extraordinary powers of vision, have been able to identify them with an unassisted eye ; but here, at least, in Nina's Hive were many rivals, for everyone could so far distinguish them one from the other as to describe them by their colours. The first was of a dull white shade ; the second was blue ; the third was white and brilliant ; the fourth was orange, at times approaching to a red.

It was further observed that Jupiter itself was almost void of scintillation.

Rosette, in his absorbing interest for the glowing glories of the planet, seemed to be beguiled into comparative forgetfulness of the charms of his comet ; but no astronomical enthusiasm of the Professor could quite allay the general apprehension that some serious collision might be impending.

Time passed on. There was nothing to justify apprehension. The question was continually being asked, "What does the Professor really think ?"

"Our friend the Professor," said Servadac, "is not likely to tell us very much ; but we may feel pretty certain of one thing : he wouldn't keep us long in the dark, if he thought we were not going back to the earth again. The greatest satisfaction he could have would be to inform us that we had parted from the earth for ever."

"I trust from my very soul," said the Count, "that his prognostications are correct."

"The more I see of him, and the more I listen to him," replied Servadac, "the more I become convinced that his calculations are based on a solid foundation, and will prove correct to the minutest particular."

Ben Zoof here interrupted the conversation.

"I have something on my mind," he said.

"Something on your mind ? Out with it !" said the Captain.

"That telescope !" said the orderly ; "it strikes me that that telescope which the old Professor keeps pointed up at yonder big sun is bringing it down straight upon us."

The Captain laughed heartily.

"Laugh, Captain, if you like ; but I feel disposed to break the old telescope into atoms."

"Ben Zoof," said Servadac, his laughter exchanged for a look of stern displeasure, "touch that telescope, and you shall swing for it !"

The orderly looked astonished.

"I am Governor here," said Servadac.

Ben Zoof knew what his master meant, and to him his master's wish was law.

The interval between the comet and Jupiter was, by the 1st of October, reduced to 43,000,000 miles—about twice the distance of the moon from the earth. Now, if Jupiter were, with regard to the earth, to change places with the moon, it is the indisputable attestation of science that its disc would be full thirty-four times larger than the moon's ; it is consequently easy to imagine what was the wondrous brilliancy of Jupiter when surveyed in the same proximity.

The belts all parallel to Jupiter's equator were very distinct in their markings. Those immediately north and south of the equator were of a dusky hue ; those toward the poles were alternately dark and light ; the intervening spaces of the planet's superficies, between edge and edge, being intensely bright. The belts themselves were occasionally broken by spots, which the records of astronomy describe as varying both in form and in extent.

The physiology of belts and spots alike was beyond the astronomer's power to ascertain ; and even if he should be destined once again to take his place in an astronomical congress on the earth, he would be just as incapable as ever of determining whether or no they owed their existence to the external accumulation of vapour, or to some internal agency. It would not be Professor Rosette's lot to enlighten his brother *savants* to any great degree as to the mysteries that are associated with this, which must ever rank as one of the most magnificent amongst the heavenly orbs.

As the comet approached the critical point of its career it cannot be denied that there was an unacknowledged consciousness of alarm. Mutually reserved, though ever courteous, the Count and the Captain were secretly drawn together by the prospect of a common danger ; and as their return to the earth appeared to them to become more and more dubious, they abandoned their views of narrow

isolation, and tried to embrace the wider philosophy that acknowledges the credibility of a habitable universe.

But no philosophy could be proof against the common instincts of their humanity ; their hearts, their hopes, were set upon their natural home ; no speculation, no science, no experience, could induce them to give up their fond and sanguine anticipation that once again they were to come in contact with the earth.

"Only let us escape Jupiter," said Lieutenant Procope, repeatedly, "and we are free from anxiety."

"But would not Saturn lie ahead?" asked Servadac and the Count in one breath.

"No!" said Procope; "the orbit of Saturn is remote, and does not come athwart our path. Jupiter is our sole hindrance. Of Jupiter we must say, as William Tell said:

'Once through the ominous pass
And all is well.'"

The 15th of October came, the date of the nearest approximation of the comet to the planet. They were only 31,000,000 miles apart. What would now transpire? Would Gallia be diverted from its proper way? or would it hold the course that the astronomer had predicted?

Early next morning the Captain ventured to take the Count and the Lieutenant up to the observatory.

The Professor was in the worst of tempers.

That was enough. It was enough, without a word, to indicate the course which events had taken.

The comet was pursuing an unaltered way.

The astronomer, correct in his prognostications, ought to have been the most proud and contented of philosophers; his pride and contentment were both overshadowed by the certainty that the career of his comet was destined to be so transient, and that it must inevitably once again come into collision with the earth.

CHAPTER X

MARKET PRICES IN GALLIA

“All right !” said Servadac, convinced by the Professor’s ill humour that the danger was past ; “no doubt we are in for a two years’ excursion, but fifteen months more will take us back to the earth !”

“And we shall see Montmartre again !” exclaimed Ben Zoof, in tones that betrayed his delight in the anticipation.

To use a nautical expression, they had safely “rounded the point,” and they had to be congratulated on their successful navigation ; for if, under the influence of Jupiter’s attraction, the comet had been retarded for a single hour, in that hour the earth would have already travelled 2,500,000 miles from the point where contact would ensue, and many centuries would elapse before such a coincidence would possibly again occur.

On the 1st of November Gallia and Jupiter were 40,000,000 miles apart. It was little more than ten weeks to the 15th of January, when the comet would begin to re-approach the sun. Though light and heat were now reduced to a twenty-fifth part of their terrestrial intensity, so that a perpetual twilight seemed to have settled over Gallia, yet the population felt cheered even by the little that was left, and buoyed up by the hope that they should ultimately regain their proper position with regard to the great luminary, of which the temperature has been estimated as not less than 5,000,000 degrees.

Of the anxiety endured during the last two months Isaac Hakkabut had known nothing. Since the day he had done his lucky stroke of business he had never left the tartan ; and after Ben Zoof, on the following day, had returned the steelyard and the borrowed cash, receiving back the paper roubles deposited, all communication between the Jew and Nina’s Hive had ceased. In the course of the few minutes’ conversation which Ben Zoof had held with

him, he had mentioned that he knew that the whole soil of Gallia was made of gold ; but the old man, guessing that the orderly was only laughing at him as usual, paid no attention to the remark, and only meditated upon the means he could devise to get every bit of the money in the new world into his own possession.

No one grieved over the life of solitude which Hakkabut persisted in leading. Ben Zoof giggled heartily, as he repeatedly observed " it was astonishing how they reconciled themselves to his absence."

The time came, however, when various circumstances prompted him to think he must renew his intercourse with the inhabitants of the Hive. Some of his goods were beginning to spoil, and he felt the necessity of turning them into money, if he would not be a loser ; he hoped, moreover, that the scarcity of his commodities would secure very high prices.

It happened, just about this same time, that Ben Zoof had been calling his master's attention to the fact that some of their most necessary provisions would soon be running short, and that their stock of coffee, sugar, and tobacco would want replenishing. Servadac's mind, of course, turned to the cargo on board the *Hansa*, and he resolved, according to his promise, to apply to the Jew and become a purchaser.

Mutual interest and necessity thus conspired to draw Hakkabut and the Captain together.

Often and often had Isaac gloated in his solitude over the prospect of first selling a portion of his merchandise for all the gold and silver in the colony. His recent usurious transaction had whetted his appetite. He would next part with some more of his cargo for all the paper-money they could give him ; but still he should have goods left, and they would want these. Yes, they should have these too for promissory notes. Notes would hold good when they got back again to the earth ; bills from his Excellency the Governor would be good bills ; anyhow there would be

the sheriff. By the God of Israel ! he would get good prices, and he would get fine interest !

Although he did not know it, he was proposing to follow the practice of the Gauls of old, who advanced money on bills for payment in a future life. Hakkabut's "future life," however, was not many months in advance of the present.

Still Hakkabut hesitated to make the first advance, and it was accordingly with much satisfaction that he hailed Captain Servadac's appearance on board the *Hansa*.

"Hakkabut," said the Captain, plunging without further preface into business, "we want some coffee, some tobacco, and other things. I have come to-day to order them, to settle the price, and to-morrow Ben Zoof shall fetch the goods away."

"Merciful heavens !" the Jew began to whine ; but Servadac cut him short.

"None of that miserable howling ! Business ! I am come to buy your goods. I shall pay for them."

"Ah yes, your Excellency," whimpered the Jew, his voice trembling like a street beggar. "Don't impose on me. I am poor ; I am nearly ruined already."

"Cease your wretched whining, I say !" cried Servadac. "I have told you once, I shall pay for all I buy."

"Ready money ?" asked Hakkabut.

"Yes, ready money. What makes you ask ?" said the Captain, curious to hear what the Jew would say.

"Well, you see—you see, your Excellency," stammered out the Jew, "to give credit to one wouldn't do, unless I gave credit to another. You are solvent—I mean honourable, and his lordship the Count is honourable ; but maybe—maybe——"

"Well ?" said Servadac, waiting, but inclined to kick the old rascal out of his sight.

"I shouldn't like to give credit," he repeated.

"I have not asked you for credit. I have told you, you shall have ready money."

"Very good, your Excellency. But how will you pay me?"

"Pay you? Why, we shall pay you in gold and silver and copper, while our money lasts, and when that is gone we shall pay you in bank-notes."

"Oh, no paper, no paper!" groaned out the Jew, relapsing into his accustomed whine.

"Nonsense, man!" cried Servadac.

"No paper!" reiterated Hakkabut.

"Why not? Surely you can trust the banks of England, France, and Russia."

"Ah no! I must have gold. Nothing so safe as gold."

"Well then," said the Captain, not wanting to lose his temper, "you shall have it your own way; we have plenty of gold for the present. We will leave the bank-notes for by-and-by."

The Jew's countenance brightened, and Servadac, repeating that he should come again the next day, was about to quit the vessel.

"One moment, your Excellency," said Hakkabut, sidling up with a hypocritical smile; "I suppose I am to fix my own prices."

"You will, of course, charge ordinary prices—proper market-prices; European prices, I mean."

"Merciful heavens!" shrieked the old man, "you rob me of my rights; you defraud me of my privilege. The monopoly of the market belongs to me. It is the custom; it is my right; it is my privilege to fix my own prices."

Servadac made him understand that he had no intention of swerving from his decision.

"Merciful heavens!" again howled the Jew, "it is sheer ruin. The time of monopoly is the time for profit; it is the time for speculation."

"The very thing, Hakkabut, that I am anxious to prevent. Just stop now, and think a minute. You seem to forget *my* rights; you are forgetting that, if I please, I can confiscate all your cargo for the common use. You ought

to think yourself lucky in getting any price at all. Be contented with European prices ; you will get no more. However, I am not going to waste my breath on you. I will come again to-morrow " ; and, without allowing Hakkabut time to renew his lamentations, Servadac went away.

All the rest of the day the Jew was muttering bitter curses against the thieves of Gentiles in general, and the Governor of Gallia in particular, who were robbing him of his just profits, by binding him down to a maximum price for his goods, just as if it were a time of revolution in the state. But he would be even with them yet ; he would have it all out of them : he would make European prices pay, after all. He had a plan—he knew how ; and he chuckled to himself, and grinned maliciously.

True to his word, the Captain next morning arrived at the tartan. He was accompanied by Ben Zoof and two Russian sailors.

" Good morning, old Eleazar ; we have come to do our little bit of friendly business with you, you know," was Ben Zoof's greeting.

" What do you want to-day ? " asked the Jew.

" To-day we want coffee, and we want sugar, and we want tobacco. We must have ten kilogrammes of each. Take care they are all good ; all first-rate. I am commissariat officer, and I am responsible."

" I thought you were the Governor's aide-de-camp," said Hakkabut.

" So I am, on state occasions ; but to-day, I tell you, I am superintendent of the commissariat department. Now look sharp ! "

Hakkabut thereupon descended into the hold of the tartan, and soon returned, carrying ten packets of tobacco, each weighing one kilogramme, and securely fastened by strips of paper, labelled with the French Government stamp.

" Ten kilogrammes of tobacco at twelve francs a kilogramme : a hundred and twenty francs," said the Jew.

Ben Zoof was on the point of laying down the money, when Servadac stopped him.

"Let us just see whether the weight is correct."

Hakkabut pointed out that the weight was duly registered on every packet, and that the packets had never been unfastened.

The Captain, however, had his own special object in view, and would not be diverted.

The Jew fetched his steelyard, and a packet of the tobacco was suspended to it.

"Merciful heavens!" screamed Isaac.

The index registered only 133 grammes!

"You see, Hakkabut, I was right. I was perfectly justified in having your goods put to the test," said Servadac quite seriously.

"But—but, your Excellency——" stammered out the bewildered man.

"You will, of course, make up the deficiency," the Captain continued, not noticing the interruption.

"Oh, my Lord, let me say——" began Isaac again.

"Come, come, old Caiaphas, do you hear? You are to make up the deficiency," exclaimed Ben Zoof.

"Ah, yes, yes; but——"

The unfortunate Israelite tried hard to speak, but his agitation prevented him. He understood well enough the cause of the phenomenon, but he was overpowered by the conviction that the "cursed Gentiles" wanted to cheat him. He deeply regretted that he had not a pair of common scales on board.

"Come, I say, old Jedediah, you are a long while making up what's short," said Ben Zoof, while the Jew was still stammering on.

As soon as he recovered his power of articulation, Isaac began to pour out a medley of lamentations and petitions for mercy.

The Captain was inexorable.

"Very sorry, you know, Hakkabut. It is not my fault

that the packet is short weight ; but I cannot pay for a kilogramme except I have a kilogramme."

Hakkabut pleaded for some consideration.

"A bargain is a bargain," said Servadac. "You must complete your contract."

And, moaning and groaning, the miserable man was driven to make up the full weight as registered by his own steelyard. He had to repeat the process with the sugar and coffee : for every kilogramme he had to weigh seven. Ben Zoof and the Russians jeered him most unmercifully.

"I say, old Mordecai, wouldn't you rather give your goods away, than sell them at this rate ? I would."

"I say, old Pilate, a monopoly isn't always a good thing, is it ?"

"I say, old Sepharvaim, what a flourishing trade you're driving !"

Meanwhile seventy kilogrammes of each of the articles required were weighed, and the Jew for each seventy had to take the price of ten.

All along Captain Servadac had been acting only in jest. Aware that old Isaac was an utter hypocrite, he had no compunction in turning a business transaction with him into an occasion for a bit of fun. But the joke at an end, he took care that the Jew was properly paid all his legitimate due.

The party then quitted the *Hansa* ; Ben Zoof, who was in the highest spirits, on his way to the Hive singing in a stentorian voice the chorus of an old military song :—

"Right joyous to the warrior's ear,
The clarion-trumpet bright and clear ;
But joyous too, yea, welcome more,
The music of the cannon's roar !"

CHAPTER XI

FAR INTO SPACE

A month passed away. Gallia continued its course, bearing its little population onwards, so far removed from the

ordinary influence of human passions that it might almost be said that its sole ostensible vice was represented by the greed and avarice of the miserable Jew.

After all, they were but making a voyage—a strange, yet a transient, excursion through solar regions hitherto untraversed ; but if the professor's calculations were correct—and why should they be doubted ?—their little vessel was destined, after a two years' absence, once more to return “ to port.” The landing, indeed, might be a matter of difficulty ; but with the good prospect before them of once again standing on terrestrial shores, they had nothing to do at present except to make themselves as comfortable as they could in their present quarters.

Thus confident in their anticipations, neither the Captain, the Count, nor the Lieutenant felt under any serious obligation to make any extensive provisions for the future ; they saw no necessity for expending the strength of the people, during the short summer that would intervene upon the long severity of winter, in the cultivation or the preservation of their agricultural resources. Nevertheless, they often found themselves talking over the measures they would have been driven to adopt, if they had found themselves permanently attached to their present home.

Even after the turning-point in their career, they knew that at least nine months would have to elapse before the sea would be open to navigation ; but at the very first arrival of summer they would be bound to arrange for the *Dobryna* and the *Hansa* to re-transport themselves and all their animals to the shores of Gourbi Island, where they would have to commence their agricultural labours to secure the crops that must form their winter store. During four months or thereabouts, they would lead the lives of farmers and of sportsmen ; but no sooner would their hay-making and their corn harvest have been accomplished, than they would be compelled again, like a swarm of bees, to retire to their semi-troglodyte existence in the cells of Nina's Hive.

Now and then the Captain and his friends found themselves speculating whether, in the event of their having to spend another winter upon Gallia, some means could not be devised by which the dreariness of a second residence in the recesses of the volcano might be escaped. Would not another exploring expedition possibly result in the discovery of a vein of coal or other combustible matter, which could be turned to account in warming some erection which they might hope to put up? A prolonged existence in their underground quarters was felt to be monotonous and depressing, and although it might be all very well for a man like Professor Rosette, absorbed in astronomical studies, it was ill suited to the temperaments of any of themselves for any longer period than was absolutely indispensable.

One contingency there was, almost too terrible to be taken into account. Was it not to be expected that the time might come when the internal fires of Gallia would lose their activity, and the stream of lava would consequently cease to flow? Why should Gallia be exempt from the destiny that seemed to await every other heavenly body? Why should it not roll onwards, like the moon, a dark cold mass in space?

In the event of such a cessation of the volcanic eruption, whilst the comet was still at so great a distance from the sun, they would indeed be at a loss to find a substitute for what alone had served to render life endurable at a temperature of 60° below zero. Happily, however, there was at present no symptom of the subsidence of the lava's stream; the volcano continued its regular and unchanging discharge, and Servadac, ever sanguine, declared that it was useless to give themselves any anxiety upon the matter.

On the 15th of December, Gallia was 276,000,000 leagues from the sun, and, as it was approximating to the extremity of its axis major, would travel only some 11,000,000 or 12,000,000 leagues during the month. Another world was now becoming a conspicuous object in

the heavens, and Palmyrin Rosette, after rejoicing in an approach nearer to Jupiter than any other mortal man had ever attained, was now to be privileged to enjoy a similar opportunity of contemplating the planet Saturn. Not that the circumstances were altogether so favourable. Scarcely 31,000,000 miles had separated Gallia from Jupiter ; the minimum distance of Saturn would not be less than 415,000,000 miles ; but even this distance, although too great to affect the comet's progress more than had been duly reckoned on, was considerably shorter than what had ever separated Saturn from the earth.

To get any information about the planet from Rosette appeared quite impossible. Although equally by night and by day he never seemed to quit his telescope, he did not evince the slightest inclination to impart the result of his observations. It was only from the few astronomical works that happened to be included in the *Dobryna's* library that any details could be gathered, but these were sufficient to give a large amount of interesting information.

Ben Zoof, when he was made aware that the earth would be invisible to the naked eye from the surface of Saturn, declared that he then, for his part, did not care to learn any more about such a planet ; to him it was indispensable that the earth should remain in sight, and it was his great consolation that hitherto his native sphere had never vanished from his gaze.

At this date Saturn was revolving at a distance of 420,000,000 miles from Gallia, and consequently 874,440,000 miles from the sun, receiving only a hundredth part of the light and heat which that luminary bestows upon the earth. On consulting their books of reference, the colonists found that Saturn completes his revolution round the sun in a period of 29 years and 167 days, travelling at the rate of more than 21,000 miles an hour along an orbit measuring 5,490 millions of miles in length. His circumference is about 220,000 miles ; his superficies, 144,000 millions of square miles ; his volume, 143,846 millions of

cubic miles. Saturn is 735 times larger than the earth, consequently he is smaller than Jupiter ; in mass he is only 90 times greater than the earth, which gives him a density less than that of water. He revolves on his axis in 10 hrs. 29 min., causing his own year to consist of 86,630 days ; and his seasons, on account of the great inclination of his axis to the plane of his orbit, are each of the length of seven terrestrial years.

Although the light received from the sun is comparatively feeble, the nights upon Saturn must be splendid. Eight satellites—Mimas, Enceladus, Tethys, Dione, Rhea, Titan, Hyperion, and Japetus—accompany the planet ; Mimas, the nearest to its primary, rotating on its axis in $22\frac{1}{2}$ hrs., and revolving at a distance of only 120,800 miles, whilst Japetus, the most remote, occupies 79 days in its rotation, and revolves at a distance of 2,314,000 miles.

Another most important contribution to the magnificence of the nights upon Saturn is the triple ring with which, as a brilliant setting, the planet is encompassed. To an observer at the equator, this ring, which has been estimated by Sir William Herschel as scarcely 100 miles in thickness, must have the appearance of a narrow band of light passing through the zenith 12,000 miles above his head. As the observer, however, increases his latitude either north or south, the band will gradually widen out into three detached and concentric rings, of which the innermost, dark though transparent, is 9,625 miles in breadth ; the intermediate one, which is brighter than the planet itself, being 17,605 miles broad ; and the outer, of a dusky hue, being 8,660 miles broad.

Such, they read, is the general outline of this strange appendage, which revolves in its own plane in 10 hrs. 32 mins. Of what matter it is composed, and how it resists disintegration, is still an unsettled question ; but it might almost seem that the Designer of the universe, in permitting its existence, had been willing to impart to His intelligent

creatures the manner in which celestial bodies are evolved, and that this remarkable ring-system is a remnant of the nebula from which Saturn was himself developed, and which, from some unknown cause, has become solidified. If at any time it should disperse, it would either fall into fragments upon the surface of Saturn, or the fragments, mutually coalescing, would form additional satellites to circle round the planet in its path.

To any observer stationed on the planet, between the extremes of lat. 45° on either side of the equator, these wonderful rings would present various strange phenomena. Sometimes they would appear as an illuminated arch, with the shadow of Saturn passing over it like the hour-hand over a dial ; at other times they would be like a semi-aureole of light. Very often, too, for periods of several years, daily eclipses of the sun must occur through the interposition of this triple ring.

Truly, with the constant rising and setting of the satellites, some with bright discs at their full, others like silver crescents, in quadrature, as well as by the encircling rings, the aspect of the heavens from the surface of Saturn must be as impressive as it is gorgeous.

Unable, indeed, the Gallians were to realise all the marvels of this strange world. After all, they were practically a thousand times further off than the great astronomers have been able to approach by means of their giant telescopes. But they did not complain ; their little comet, they knew, was far safer where it was ; far better out of the reach of an attraction which, by affecting their path, might have annihilated their best hopes.

While thus they failed to attain to any great personal acquaintance with the glories of Saturn, still less did they penetrate into any of the mysteries of the more distant world of Uranus, although that planet, which from the earth appears only as a star of the sixth magnitude, did become visible to their naked eye. Yet as to the satellites which accompany him on his revolution of 84 years, at a distance

of 1,753,851,000 miles from the sun, it must be owned that not one of them was ever to be discerned.

With regard to Neptune, the most distant planet of our system (until an Adams or Le Verrier of the future shall discover another still more remote), *he* was beyond the range of vision. Possibly he came within the focus of the Professor's telescope, but if so, the Professor admitted no one to the honour of his confidence. The general community, to inform themselves of any particulars as to the planet's elements, had once again to fall back upon their books. There they read that Neptune's mean distance from the sun is 2,746,271,000 miles ; that the period of his revolution is 165 years ; that, a spheroid 150 times greater than the earth, he travels along his gigantic orbit at the rate of 12,000 miles an hour ; and that he is accompanied by one satellite, which performs its subsidiary orbit at a distance of about 220,000 miles.

The distance of 2,000,000,000 of miles at which Neptune revolves, represents, according to our present knowledge, the extreme limits of the solar system ; yet, enormous as that number may sound, it is quite insignificant when compared with the number which represents the radius of the sidereal group to which our sun is attached.

The sun, in fact, appears to form part of the expansive nebula known as the Milky Way, in which he occupies the modest place of a star of about the fourth magnitude. Had Gallia been projected beyond the limits of the sun's attraction, it is within the province of imagination to conjecture that she would have taken for her new centre the nearest of the fixed stars. This star is Alpha in the constellation Centaur ; its distance from the sun is more than 16 millions of millions of miles, a number the prodigiousness of which may be realised to a certain degree by the statement that light, which travels at the rate of 186,000 miles a second, would occupy no less than three years and a half in traversing the interval between the star and our sun.

The distances of several of the brightest of the fixed stars have been estimated. Amongst others, Vega in the constellation Lyra is 100 millions of millions of miles away ; Sirius in Canis Major, 123 millions of millions ; the Polestar, 282 millions of millions ; and Capella, 340 millions of millions of miles, a figure represented by no less than fifteen digits.

The hard numerical statement of these enormous figures, however, fails altogether in any adequate way to convey a due impression of the magnitude of these distances. Astronomers, in their ingenuity, have endeavoured to use some other basis, and have found " the velocity of light " to be convenient for their purpose. They have made their representations something in this way :

" Suppose," they say, " an observer endowed with an infinite length of vision : suppose him stationed on the surface of Capella ; looking thence towards the earth, he would be a spectator of events that had happened seventy years previously : transport him to a star ten times distant, and he will be reviewing the terrestrial sphere of 720 years back : carry him away further still, to a star so remote that it requires something less than nineteen centuries for light to reach it, and he would be a witness of the birth and death of Christ : convey him further again, and he shall be looking upon the dread desolation of the Deluge : take him away further yet (for space is infinite), and he shall be a spectator of the Creation of the spheres. History is thus stereotyped in space ; nothing once accomplished can ever be effaced."

Who can altogether be astonished that Palmyrin Rosette, with his burning thirst for astronomical research, should have been conscious of a longing for yet wider travel through the sidereal universe ? With his comet now under the influence of one star, now of another, what various systems might he not have explored ! what undreamt-of marvels might not have revealed themselves before his gaze ! The stars, fixed and immovable in name, are all

of them in motion, and Gallia might have followed them in their untracked way.

This motion of the fixed stars is really very rapid. Arcturus is travelling at the rate of at least fifty-four miles a second ; our sun is approaching Hercules at the rate of 240 miles a minute ; and yet, so great is the distance that observers on the earth have hitherto been unable to discern any appreciable difference.

Still, eventually, because the stars are thus moving at unequal rates of velocity, there must ensue a change in their relative positions ; and astronomers have produced diagrams representing the appearance they will present some 50,000 years hence. In these diagrams the irregular quadrilateral of Ursa Major takes the form of a long cross, and the pentagon of Orion has resolved itself into a quadrilateral.

But even if Gallia had been transported to other systems, it would not have been competent to Palmyrin Rosette to view these " secular inequalities " of the spheres ; the contemplation, however, of other marvels, exceeding what the solar system has to offer, would more than sufficiently have ravished his view. He would have seen for himself that other planetary groups are not always governed by a single sun, but that occasionally two, three, four, or even six suns will revolve about each other with reciprocal influence. He would have found, too, in these compound systems, suns of various hue—red, yellow, green, orange, purple, and white—lighting up their planets with rays of glorious colouring ; one sun perhaps setting in clearest green, another rising in resplendent crimson, or in dazzling yellow ; at times two suns together mingling the tints of their varied beams ; and perpetually, day after day, the whole horizon decked with all the colours of the rainbow.

But Gallia had a narrow destiny. She was not to be allowed to wander away into the range of attraction of another centre ; nor to mingle with the star clusters, some

of which have been entirely, others partially resolved ; nor was she to lose herself amongst the 5,000 nebulae which have resisted hitherto the grasp of the most powerful reflectors. No ; Gallia was neither to pass beyond the limits of the solar system, nor to travel out of sight of the terrestrial sphere. Her orbit was circumscribed to little over 1,500 millions of miles ; and, in comparison with the infinite space beyond, this was a mere nothing.

CHAPTER XII

A FÊTE DAY

The temperature continued to increase ; the mercurial thermometer, which freezes at 42° below zero, was no longer of service, and the spirit thermometer of the *Dobryna* had been brought into use. This now registered 53° below freezing-point.

In the creek, where the two vessels had been moored for the winter, the elevation of the ice, in anticipation of which Lieutenant Procope had taken the precautionary measure of bevelling, was going on slowly but irresistibly, and the tartan was upheaved fifty feet above the level of the Gallian Sea, while the schooner, as being lighter, had been raised to a still greater altitude.

So irresistible was this gradual process of elevation, so utterly defying all human power to arrest, that the Lieutenant began to feel very anxious as to the safety of his yacht. With the exception of the engine and the masts, everything had been cleared out and conveyed to shore, but in the event of a thaw it appeared that nothing short of a miracle could prevent the hull from being dashed to pieces, and then all means of leaving the promontory would be gone. The *Hansa*, of course, would share a similar fate ; in fact, it had already heeled over to such an extent as to render it quite dangerous for its obstinate owner, who, at the peril of his life, resolved that he would stay where

he could watch over his all-precious cargo, though continually invoking curses on the ill-fate of which he deemed himself the victim.

There was, however, a stronger will than Isaac Hakkabut's. Although no one of all the community cared at all for the safety of the Jew, they cared very much for the security of his cargo, and when Servadac found that nothing would induce the old man to abandon his present quarters voluntarily, he very soon adopted measures of coercion that were far more effectual than any representations of personal danger.

"Stop where you like, Hakkabut," said the Captain to him ; "but understand that I consider it my duty to make sure that your cargo is taken care of. I am going to have it carried across to land, at once."

Neither groans, nor tears, nor protestations on the part of the Jew, were of the slightest avail. Forthwith, on the 20th of December, the removal of the goods commenced.

Both Spaniards and Russians were all occupied for several days in the work of unlading the tartan. Well muffled up as they were in furs, they were able to endure the cold with impunity, making it their special care to avoid actual contact with any article made of metal, which, in the low state of the temperature, would inevitably have taken all the skin off their hands, as much as if it had been red-hot. The task, however, was brought to an end without accident of any kind ; and when the stores of the *Hansa* were safely deposited in the galleries of the Hive, Lieutenant Procope avowed that he really felt that his mind had been unburdened from a great anxiety.

Captain Servadac gave old Isaac full permission to take up his residence amongst the rest of the community, promised him the entire control over his own property, and altogether showed him so much consideration that, but for his unbounded respect for his master, Ben Zoof would have liked to reprimand him for his courtesy to a man whom he so cordially despised.

Although Hakkabut clamoured most vehemently about his goods being carried off "against his will," in his heart he was more than satisfied to see his property transferred to a place of safety, and delighted, moreover, to know that the transport had been effected without a farthing of expense to himself. As soon, then, as he found the tartan empty, he was only too glad to accept the offer that had been made him, and very soon made his way over to the quarters in the gallery where his merchandise had been stored. Here he lived day and night. He supplied himself with what little food he required from his own stock of provisions, a small spirit-lamp sufficing to perform all the operations of his meagre cookery. Consequently all intercourse between himself and the rest of the inhabitants was entirely confined to business transactions, when occasion required that some purchase should be made from his stock of commodities. Meanwhile, all the silver and gold of the colony was gradually finding its way to a double-locked drawer, of which the Jew most carefully guarded the key.

The 1st of January was drawing near, the anniversary of the shock which had resulted in the severance of thirty-six human beings from the society of their fellow-men. Hitherto, not one of them was missing. The unvarying calmness of the climate, notwithstanding the cold, had tended to maintain them in good health, and there seemed no reason to doubt that, when Gallia returned to the earth, the total of its little population would still be complete.

The 1st of January, it is true, was not properly "New Year's Day" in Gallia, but Captain Servadac, nevertheless, was very anxious to have it observed as a holiday.

"I do not think," he said to Count Timascheff and Lieutenant Procope, "that we ought to allow our people to lose their interest in the world to which we are all hoping to return; and how can we cement the bond that ought to unite us, better than by celebrating, in common with our fellow-creatures upon earth, a day that awakens

afresh the kindest sentiments of all ? Besides," he added, smiling, " I expect that Gallia, although invisible just at present to the naked eye, is being closely watched by the telescopes of our terrestrial friends, and I have no doubt that the newspapers and scientific journals of both hemispheres are full of accounts detailing the movements of the new comet."

" True," asserted the Count. " I can quite imagine that we are occasioning no small excitement in all the chief observatories."

" Aye, more than that," said the Lieutenant ; " our Gallia is certain to be far more than a mere object of scientific interest or curiosity. Why should we doubt that the elements of a comet which has once come into collision with the earth have by this time been accurately calculated ? What our friend the Professor has done here, has been done likewise on the earth, where, beyond a question, all manner of expedients are being discussed as to the best way of mitigating the violence of a concussion that must occur."

The Lieutenant's conjectures were so reasonable that they commanded assent. Gallia could scarcely be otherwise than an object of terror to the inhabitants of the earth, who could by no means be certain that a second collision would be comparatively so harmless as the first. Even to the Gallians themselves, much as they looked forward to the event, the prospect was not unmingled with alarm, and they would rejoice in the invention of any device by which it was likely the impetus of the shock might be deadened.

It was premature, however, for concern of this sort. Come what might, the 1st of January should be celebrated as a *fête* day, the Russians professing themselves quite willing to accept the date as observed by the Frenchmen and Spaniards¹.

¹ There is a difference of eleven days between the French and Russian calendars.

Christmas arrived, and was marked by appropriate religious observance by every one in the community, with the exception of the Jew, who made a point of secluding himself more obstinately than ever in the gloomy recesses of his retreat.

To Ben Zoof the last week of the year was full of bustle. The arrangements for the *fête* were entrusted to him, and he was anxious, in spite of the resources of Gallia being so limited, to make the programme for the great day as attractive as possible.

It was settled that the proceedings should open with a grand *déjeûner*, after which there should be a promenade upon the ice in the direction of Gourbi Island, to conclude with a torch-light procession in the evening. The torches, without much difficulty, could be manufactured from materials included in the stores of the *Hansa*.

The composition of the bill of fare was an elaborate business. The orderly and the cook of the *Dobryna* were frequently to be seen in deep confabulation, so that it was to be expected that the repast would be a masterpiece of the combined arts of French and Russian cookery.

"Only let the *déjeûner* be a success," said Ben Zoof, "and I will answer for it the promenade on the ice is sure to be a success too."

On the evening of the 31st of December the table in the common hall was laid for the great collation. The hot dishes would not be prepared until the following morning, but all the cold viands—game-pies, galantines, potted meats, and other things, many of which had been obtained from Isaac Hakkabut at most exorbitant prices—were spread upon the table.

It was a matter of debate that night whether the Professor should be invited to join the party; it was scarcely likely that he would care to come, but, on the whole, it was felt to be advisable to ask him. At first Captain Servadac thought of going in person with the invitation; but, remembering Rosette's dislike to visitors, he altered his

mind, and sent young Pablo up to the observatory with a formal note, requesting the pleasure of Professor Rosette's company at the New Year's *fête*.

Pablo was soon back, bringing no answer except that the Professor had told him that "to-day was the 125th of June, and that to-morrow would be the 1st of July."

Consequently, Servadac and the Count took it for granted that Palmyrin Rosette declined their invitation.

An hour after sunrise on New Year's Day, Frenchmen, Russians, Spaniards, and little Nina, as the representative of Italy, sat down to a feast such as never before had been seen in Gallia. Ben Zoof and the Russian cook had quite surpassed themselves. A huge dish of stewed partridges, in which, in default of vegetables, enough curry-powder had been used to blister the tongue, if not to damage the coats of the stomach, was the *pièce de résistance*. The wines, part of the *Dobryna's* stores, were of excellent quality. Those of the vintages of France and Spain were drunk in toasting their respective countries, and even Russia was honoured in a similar way by means of a few bottles of kummel. The company was more than contented—it was as jovial as Ben Zoof could desire ; and the ringing cheers that followed the great toast of the day—"A happy return to our Mother Earth," must fairly have startled the Professor in the silence of his observatory.

The *déjeuner* over, there still remained three hours of daylight. The sun was approaching the zenith, but so dim and enfeebled were his rays that they were very unlike what had produced the wines of Bordeaux and Burgundy which they had just been enjoying, and it was necessary for all, before starting upon an excursion that would last over nightfall, to envelop themselves in the thickest of clothing.

Full of spirits, the party left the Hive, and chattering and singing as they went, made their way down to the frozen shore, where they fastened on their skates. Once upon the ice, every one followed his own fancy, and some singly, some in groups, scattered themselves in all directions.

Captain Servadac, the Count, and the Lieutenant were generally seen together. Negrete and the Spaniards, now masters of their novel exercise, wandered fleetly and gracefully hither and thither, occasionally being out of sight completely. The Russian sailors, following a northern custom, skated in file, maintaining their rank by means of a long pole passed under their right arms, and in this way they described a trackway of singular regularity. The two children, blithe as birds, flitted about, now singly, now arm-in-arm, now joining the Captain's party, now making a short peregrination by themselves, but always full of life and spirit. As for Ben Zoof, he was here, there, and everywhere, his imperturbable good temper ensuring him a smile of welcome whenever he appeared.

Thus coursing rapidly over the icy plain, the whole party had soon exceeded the line that made the horizon from the shore. First, the rocks of the coast were lost to view ; then the white crests of the cliffs were no longer to be seen ; and at last, the summit of the volcano, with its corona of vapour, was entirely cut of sight. Occasionally the skaters were obliged to stop to recover their breath, but, fearful of frost-bite, they almost instantly resumed their exercise, and proceeded nearly as far as Gourbi Island before they thought about retracing their course.

But night was coming on, and the sun was already sinking in the east with the rapidity to which the residents on Gallia were by this time well accustomed. The sunset upon this contracted horizon was very remarkable. There was not a cloud nor a vapour to catch the tints of the declining beams ; the surface of the ice did not, as a liquid sea would, reflect the last green ray of light ; but the radiant orb, enlarged by the effect of refraction, its circumference sharply defined against the sky, sank abruptly, as though a trap had been opened in the ice for its reception.

Before the daylight ended, Captain Servadac had cautioned the party to collect themselves betimes into one group.

“ Unless you are sure of your whereabouts before dark,” he said, “ you will not find it after. We have come out like a party of skirmishers ; let us go back in full force.”

The night would be dark ; their moon was in conjunction, and would not be seen ; the stars would only give something of that “ pale radiance ” which the poet Cornielle has described.

Immediately after sunset the torches were lighted, and the long series of flames, fanned by the rapid motion of their bearers, had much the appearance of an enormous fiery banner. An hour later, and the volcano appeared like a dim shadow on the horizon, the light from the crater shedding a lurid glare upon the surrounding gloom. In time the glow of the burning lava, reflected in the icy mirror, fell upon the troop of skaters, and cast their lengthened shadows grotesquely on the surface of the frozen sea.

Later still, half an hour or more afterwards, the torches were all but dying out. The shore was close at hand. All at once, Ben Zoof uttered a startled cry, and pointed with bewildered excitement towards the mountain. Involuntarily, one and all, they ploughed their heels into the ice and came to a halt. Exclamations of surprise and horror burst from every lip. The volcano was extinguished ! The stream of burning lava had suddenly ceased to flow !

Speechless with amazement, they stood still for some moments. There was not one of them that did not realise, more or less, how critical was their position. The sole source of the heat that had enabled them to brave the rigour of the cold had failed them ! death, in the cruellest of all shapes seemed staring them in the face—death from cold !

Meanwhile, the last torch had flickered out.

It was quite dark.

“ Forward ! ” cried Servadac, firmly.

At the word of command they advanced to the shore ; clambered with no little difficulty up the slippery rocks ; gained the mouth of the gallery ; groped their way into the common hall.

How dreary ! how chill it seemed !

The fiery cataract no longer spread its glowing covering over the mouth of the grotto. Lieutenant Procope leaned through the aperture. The pool, hitherto kept fluid by its proximity to the lava, was already encrusted with a layer of ice.

Such was the end of the New Year's Day so happily begun.

CHAPTER XIII

THE BOWELS OF THE COMET

The whole night was spent in speculating, with gloomy forebodings, upon the chances of the future. The temperature of the hall, now entirely exposed to the outer air, was rapidly falling, and would quickly become unendurable. Far too intense was the cold to allow any one to remain at the opening, and the moisture on the walls soon resolved itself into icicles. But the mountain was like the body of a dying man, that retains awhile a certain amount of heat at the heart after the extremities have become cold and dead. In the more interior galleries there was still a certain degree of warmth, and hither Servadac and his companions were glad enough to retreat.

Here they found the Professor, who, startled by the sudden cold, had been fain to make a precipitate retreat from his observatory. Now would have been the opportunity to demand of the enthusiast whether he would like to prolong his residence indefinitely upon his little comet. It is very likely that he would have declared himself ready to put up with any amount of discomfort to be able to gratify his love of investigation ; but all were far too disheartened and distressed to care to banter him upon the subject on which he was so sensitive.

Next morning, Servadac thus addressed his people :

“ My friends, except from cold, we have nothing to fear. Our provisions are ample—more than enough for the

remaining period of our sojourn in this lone world of ours ; our preserved meat is already cooked ; we shall be able to dispense with all fuel for cooking purposes. All that we require is warmth—warmth for ourselves : let us secure that, and all may be well. Now, I do not entertain a doubt but that the warmth we require is resident in the bowels of this mountain on which we are living ; to the depth of those bowels we must penetrate ; there we shall obtain the warmth which is indispensable to our very existence.”

His tone, quite as much as his words, restored confidence to many of his people, who were already yielding to a feeling of despair. The Count and the Lieutenant fervently, but silently, grasped his hand.

“Nina,” said the Captain, “you will not be afraid to go down to the lower depths of the mountain, will you ? ”

“Not if Pablo goes,” replied the child.

“Oh yes, of course, Pablo will go. You are not afraid to go, are you, Pablo ? ” he said, addressing the boy.

“Anywhere with you, your Excellency,” was the boy’s prompt reply.

And certain it was that no time must be lost in penetrating below the heart of the volcano ; already the most protected of the many ramifications of Nina’s Hive were being pervaded by a cold that was insufferable.

The conviction became more and more settled that heat was existent in the deep recesses of the volcano ; the question became more and more urgent, how that heat could be reached, and how it could be utilised.

It was an acknowledged impossibility to get access to the crater by the exterior declivities of the mountain-side ; they were far too steep and too slippery to afford a foot-hold. It must of necessity be entered from the interior.

Lieutenant Procope accordingly undertook the task of exploring all the galleries, and was soon able to report that he had discovered one which he had every reason to

believe abutted upon the central funnel. His reason for coming to this conclusion was that the caloric emitted by the rising vapours of the hot lava seemed to be oozing, as it were, out of the tellurium, which had been demonstrated already to be a conductor of heat. Only succeed in piercing through this rock for seven or eight yards, and the Lieutenant did not doubt that his way would be opened into the old lava-course, by following which he hoped descent would be easy.

Under the Lieutenant's direction the Russian sailors were immediately set to work. Their former experience had convinced them that spades and pick-axes were of no avail, and their sole resource was to proceed by blasting with gunpowder. However skilfully the operation might be carried on, it must necessarily occupy several days, and during that time the sufferings from cold must be very severe.

"If we fail in our object, and cannot get to the depths of the mountain, our little colony is doomed," said Count Timascheff.

"That speech is not like yourself," answered Servadac, smiling. "What has become of the faith which has hitherto carried you so bravely through all our difficulties?"

The Count shook his head, as if in despair, and said, sadly :

"The Hand that has hitherto been outstretched to help seems now to be withdrawn."

"But only to test our powers of endurance," rejoined the Captain, earnestly. "Courage, my friend, courage ! Something tells me that this cessation of the eruption is only partial ; the internal fire is not all extinct. All is not over yet. It is too soon to give up ; never despair !"

Lieutenant Procope quite concurred with the Captain. Many causes, he knew, besides the interruption of the influence of the oxygen upon the mineral substances in Gallia's interior, might account for the stoppage of the lava-flow in this one particular spot, and he considered it

more than probable that a fresh outlet had been opened in some other part of the surface, and that the eruptive matter had been diverted into the new channel. But at present his business was to prosecute his labours so that a retreat might be immediately effected from their now untenable position.

Restless and agitated, Professor Rosette, if he took any interest in these discussions, certainly took no share in them. He had brought his telescope down from the observatory into the common hall, and there at frequent intervals, by night and by day, he would endeavour to continue his observations ; but the intense cold perpetually compelled him to desist, or he would literally have been frozen to death. No sooner, however, did he find himself obliged to retreat from his study of the heavens, than he would begin overwhelming everybody about him with bitter complaints, pouring out his regrets that he had ever quitted his quarters at Formentera.

On the 4th of January, by persevering industry, the process of boring was completed, and the Lieutenant could hear that fragments of the blasted rock, as the sailors cleared them away with their spades, were rolling into the funnel of the crater. He noticed, too, that they did not fall perpendicularly, but seemed to slide along, from which he inferred that the sides of the crater were sloping ; he had therefore reason to hope that a descent would be found practicable.

Larger and larger grew the orifice ; at length it would admit a man's body, and Ben Zoof, carrying a torch, pushed himself through it, followed by the Lieutenant and Servadac. Procope's conjecture proved correct. On entering the crater, they found that the sides slanted at the angle of about 45° ; moreover, the eruption had evidently been of recent origin, dating probably only from the shock which had invested Gallia with a proportion of the atmosphere of the earth, and beneath the coating of ashes with which they were covered, there were various irregularities

in the rock, not yet worn away by the action of the lava, and these afforded a tolerably safe footing.

"Rather a bad staircase!" said Ben Zoof, as they began to make their way down.

In about half an hour, proceeding in a southerly direction, they had descended nearly five hundred feet. From time to time they came upon large excavations that at first sight had all the appearance of galleries, but by waving his torch, Ben Zoof could always see their extreme limits, and it was evident that the lower strata of the mountain did not present the same system of ramification that rendered the Hive above so commodious a residence.

It was not a time to be fastidious; they must be satisfied with such accommodation as they could get, provided it was warm. Captain Servadac was only too glad to find that his hopes about the temperature were to a certain extent realised. The lower they went, the greater was the diminution in the cold, a diminution that was far more rapid than that which is experienced in making the descent of terrestrial mines. In this case it was a volcano, not a colliery, that was the object of exploration, and thankful enough they were to find that it had not become extinct. Although the lava, from some unknown cause, had ceased to rise and overflow the crater, yet plainly it existed somewhere in an incandescent state, and was still transmitting considerable heat to inferior strata.

Lieutenant Procope had brought in his hand a mercurial thermometer, and Servadac carried an aneroid barometer, by means of which he could estimate the depth of their descent below the level of the Gallian Sea. When they were six hundred feet below the orifice the mercury registered a temperature of 6° below zero.

"Six degrees!" said Servadac; "that will not suit us. At this low temperature we could not survive the winter. We must try deeper down. I only hope the ventilation will hold out."

There was, however, nothing to fear on the score of

ventilation. The great current of air that rushed into the aperture penetrated everywhere, and made respiration perfectly easy.

The descent was continued for about another three hundred feet, which brought the explorers to a total depth of nine hundred feet from their old quarters. Here the thermometer registered 12° above zero—a temperature which, if only it were permanent, was all they wanted. There was no advantage in proceeding any further along the lava-course ; they could already hear dull rumblings that indicated that they were at no great distance from the central focus.

“Quite near enough for me !” exclaimed Ben Zoof. “Those who are chilly are welcome to go as much lower as they like. For my part, I shall be quite warm enough here.”

After throwing the gleams of torch-light in all directions, the explorers seated themselves on a jutting rock, and began to debate whether it was practicable for the colony to make an abode in these lower depths of the mountain. The prospect, it must be owned, was not inviting. The crater, it is true, widened out into a cavern sufficiently large, but here its accommodation ended. Above and below were a few ledges in the rock that would serve as receptacles for provisions ; but, with the exception of a small recess that must be reserved for Nina, it was clear that henceforth they must all renounce the idea of having separate apartments. The single cave must be their dining-room, drawing-room, and dormitory, all in one. From living the life of rabbits in a warren, they were reduced to the existence of moles, with the difference that they could not, like them, forget their troubles in a long winter’s sleep.

The cavern, however, was quite capable of being lighted by means of lamps and lanterns. Among the stores were several barrels of oil and a considerable quantity of spirits of wine, which might be burnt when required for cooking purposes. Moreover, it would be unnecessary for them to

confine themselves entirely to the seclusion of their gloomy residence ; well wrapped up, there would be nothing to prevent them making occasional excursions both to the Hive and to the sea-shore. A supply of fresh water would be constantly required ; ice for this purpose must be perpetually carried in from the coast, and it would be necessary to arrange that every one in turn should perform this office, as it would be no sinecure to clamber up the sides of the crater for 900 feet, and descend the same distance with a heavy burden.

But the emergency was great, and it was accordingly soon decided that the little colony should forthwith take up its quarters in the cave. After all, they said, they should hardly be much worse off than thousands who annually winter in Arctic regions. On board the whaling-vessels, and in the establishments of the Hudson's Bay Company, such luxuries as separate cabins or sleeping-chambers are never thought of ; one large apartment, well heated and ventilated, with as few corners as possible, is considered far more healthy ; and on board ship the entire hold, and in forts a single floor, is appropriated to this purpose. The recollection of this fact served to reconcile them, in a great degree, to the change to which they felt it requisite to submit.

Having remounted the ascent, they made the result of their exploration known to the mass of the community, who received the tidings with a sense of relief, and cordially accepted the scheme of the migration.

The first step was to clear the cavern of its accumulation of ashes, and then the labour of removal commenced in earnest. Never was a task undertaken with greater zest. The fear of being to a certainty frozen to death if they remained where they were, was a stimulus that made everyone put forth all his energies. Beds, furniture, cooking utensils—first the stores of the *Dobryna*, then the cargo of the tartan—all were carried down with the greatest alacrity, and the diminished weight combined with the downhill

route to make the labour proceed with incredible briskness.

Although Professor Rosette yielded to the pressure of circumstances, and allowed himself to be conducted to the lower regions, nothing would induce him to allow his telescope to be carried underground ; and as it was undeniable that it would certainly be of no service deep down in the bowels of the mountain, it was allowed to remain undisturbed upon its tripod in the great hall of Nina's Hive.

As for Isaac Hakkabut, his outcry was beyond description lamentable. Never, in the whole universe, had a merchant met with such reverses ; never had such a pitiable series of losses befallen an unfortunate man. Regardless of the ridicule which his abject wretchedness excited, he howled on still, and kept up an unending wail ; but meanwhile he kept a keen eye upon every article of his property, and amidst universal laughter insisted on having every item registered in an inventory as it was transferred to its appointed place of safety. Servadac considerably allowed the whole of the cargo to be deposited in a hollow apart by itself, over which the Jew was permitted to keep a watch as vigilant as he pleased.

By the 10th the removal was accomplished. Rescued, at all events, from the exposure to a perilous temperature of 60° below zero, the community was installed in its new home. The large cave was lighted by the *Dobryna's* lamps, while several lanterns, suspended at intervals along the acclivity that led to their deserted quarters above, gave a weird picturesqueness to the scene, that might vie with any of the graphic descriptions of the *Arabian Nights' Entertainments*.

"How do you like this, Nina ?" said Ben Zoof.

"*Va bene !*" replied the child. "We are only living in the cellars instead of upon the ground floor."

"We will try and make ourselves comfortable," said the orderly.

"Oh, yes, we will be happy here," rejoined the child ; "it is nice and warm."

Although they were as careful as they could be to conceal their misgivings from the rest, Servadac and his two friends could not regard their present situation without distrust. When alone, they would frequently ask each other what would become of them all, if the volcanic heat should really be subsiding, or if some unexpected perturbation should retard the course of the comet, and compel them to an indefinitely prolonged residence in their grim abode. It was scarcely likely that the comet could supply the fuel of which ere long they would be in urgent need. Who could expect to find coal in the bowels of Gallia—coal, which is the residuum of ancient forests mineralised by the lapse of ages? Would not the lava-cinders exhumed from the extinct volcano be their last poor resource?

“Keep up your spirits, my friends,” said Servadac; “we have plenty of time before us at present. Let us hope that as fresh difficulties arise, fresh ways of escape will open. Never despair!”

“True,” said the Count; “it is an old saying that ‘Necessity is the mother of invention.’ Besides, I should think it very unlikely that the internal heat will fail us now before the summer.”

The Lieutenant declared that he entertained the same hope. As the reason of his opinion he alleged that the combustion of the eruptive matter was most probably of quite recent origin, because the comet before its collision with the earth had possessed no atmosphere, and that consequently no oxygen could have penetrated to its interior.

“Most likely you are right,” replied the Count; “and so far from dreading a failure of the internal heat, I am not quite sure that we may not be exposed to a more terrible calamity still.”

“What?” asked Servadac.

“The calamity of the eruption breaking out suddenly again, and taking us by surprise.”

“Heavens!” cried the Captain, “we will not think of that.”

“ The outbreak may happen again,” said the Lieutenant, calmly ; “ but it will be our fault, our own lack of vigilance, if we are taken by surprise.”

And so the conversation dropped.

The 15th of January dawned ; and the comet was 220,000,000 leagues from the sun.

Gallia had reached its aphelion.

CHAPTER XIV

DREARY MONTHS

Henceforth, then, with a velocity ever increasing, Gallia would re-approach the sun.

Except the thirteen Englishmen who had been left at Gibraltar, every living creature had taken refuge in the dark abyss of the volcano's crater.

And with those Englishmen, how had it fared ?

“ Far better than with ourselves,” was the sentiment that would have been universally accepted in Nina's Hive.

And there was every reason to conjecture that so it was. The party at Gibraltar, they all agreed, would not, like themselves, have been compelled to have recourse to a stream of lava for their supply of heat ; they, no doubt, had had abundance of fuel as well as food ; and in their solid casemate, with its substantial walls, they would find ample shelter from the rigour of the cold. The time would have been passed at least in comfort, and perhaps in contentment ; and Colonel Murphy and Major Oliphant would have had leisure more than sufficient for solving the most abstruse problems of the chess-board. All of them, too, would be happy in the confidence, that when the time should come, England would have full meed of praise to award to the gallant soldiers who had adhered so well and so manfully to their post.

It did, indeed, more than once occur to the minds both of Servadac and his friends that, if their condition should

become one of extreme emergency, they might, as a last resource, betake themselves to Gibraltar, and there seek a refuge ; but their former reception had not been of the kindest, and they were little disposed to renew an acquaintanceship that was marked by so little cordiality. Not in the least that they would expect to meet with any inhospitable rebuff. Far from that ; they knew well enough that Englishmen, whatever their faults, would be the last to abandon their fellow-creatures in the hour of distress. Nevertheless, except the necessity became far more urgent than it had hitherto proved, they resolved to endeavour to remain in their present quarters. Up till this time no casualties had diminished their original number, but to undertake so long a journey across that unsheltered expanse of ice could scarcely fail to result in the loss of some of their party.

However great was the desire to find a retreat for every living thing in the deep hollow of the crater, it was found necessary to slaughter almost all the domestic animals before the removal of the community from Nina's Hive. To have stabled them all in the cavern below would have been quite impossible, whilst to have left them in the upper galleries would only have been to abandon them to a cruel death ; and since meat could be preserved for an indefinite time in the original store-places, now colder than ever, the expedient of killing off the animals seemed to recommend itself as being equally prudent and humane.

Naturally the Captain and Ben Zoof were most anxious that their favourite horses should be saved, and accordingly, by dint of the greatest care, all difficulties in the way were overcome, and Zephyr and Galette were conducted down the crater, where they were installed in a large hole and provided with forage, which was still abundant.

Birds, subsisting only on scraps thrown out to them, did not cease to follow the population in its migration, and so numerous did they become that multitudes of them had repeatedly to be destroyed.

The general re-arrangement of the new residence was no easy business, and occupied so much time that the end of January arrived before they could be said to be fairly settled. And then began a life of dreary monotony. Then seemed to creep over everyone a kind of moral torpor as well as physical lassitude, which Servadac, the Count, and the Lieutenant did their best not only to combat in themselves, but to counteract in the general community. They provided a variety of intellectual pursuits ; they instituted debates in which everybody was encouraged to take part ; they read aloud, and explained extracts from the elementary manuals of science, or from the books of adventurous travel which their library supplied ; and Russians and Spaniards, day after day, might be seen gathered round the large table, giving their best attention to instruction which should send them back to Mother Earth less ignorant than they had left her.

Selfish and morose, Hakkabut could never be induced to be present at these social gatherings. He was far too much occupied in his own appropriated corner, either in conning his accounts, or in counting his money. Altogether, with what he had before, he now possessed the round sum of 150,000 francs, half of which was in sterling gold ; but nothing could give him any satisfaction while he knew that the days were passing, and that he was denied the opportunity of putting out his capital in advantageous investments, or securing a proper interest.

Neither did Palmyrin Rosette find leisure to take any share in the mutual intercourse. His occupation was far too absorbing for him to suffer it to be interrupted, and to him, living as he did perpetually in a world of figures, the winter days seemed neither long nor wearisome. Having ascertained every possible particular about his comet, he was now devoting himself with equal ardour to the analysis of all the properties of the satellite Nerina, to which he appeared to assert the same claim of proprietorship.

In order to investigate the new elements which belonged

to Nerina, in consequence of its removal from the zone of the telescopic planets, it was indispensable that he should make several actual observations at various points of the orbit ; and for this purpose he repeatedly made his way up to the grotto above, where, in spite of the extreme severity of the cold, he would persevere in the use of his telescope till he was all but paralysed. But what he felt more than anything was the want of some retired apartment, where he could pursue his studies without hindrance or intrusion.

It was about the beginning of February, when the Professor brought his complaint to Captain Servadac, and begged him to assign him a chamber, no matter how small, in which he should be free to carry on his task in silence and without molestation. So readily did Servadac promise to do everything in his power to provide him with the accommodation for which he asked, that the Professor was put into such manifest good temper that the Captain ventured to speak upon the matter that was ever uppermost in his mind.

"I do not mean," he began timidly, "to cast the least imputation of inaccuracy upon any of your calculations, but would you allow me, my dear Professor, to suggest that you should revise your estimate of the duration of Gallia's period of revolution. It is so important, you know, so all important ; the difference of one half-minute, you know, would so certainly mar the expectation of reunion with the Earth——"

And seeing a cloud gathering on Rosette's face, he added :

"I am sure Lieutenant Procope would be only too happy to render you any assistance in the revision."

"Sir," said the Professor, bridling up, "I want no assistant ; my calculations want no revision. I never make an error. I have made my reckoning as far as Gallia is concerned. I am now making a like estimate of the elements of Nerina."

Conscious how impolitic it would be to press this matter further, the Captain casually remarked that he should have supposed that all the elements of Nerina had been calculated long since by astronomers on the earth. It was about as unlucky a speech as he could possibly have made. The Professor glared at him fiercely.

"Astounding, sir!" he exclaimed. "Yes! Nerina was a planet then; everything that appertained to the planet was determined; but Nerina is a moon now. And do you not think, sir, that we have a right to know as much about our moon as those *terrestrials*"—and he curled his lip as he spoke with a contemptuous emphasis—"know of theirs?"

"I beg pardon," said the corrected Captain.

"Well then, never mind," replied the Professor, quickly appeased; "only will you have the goodness to get me a proper place for study?"

"I will, as I promised, do all I can," answered Servadac.

"Very good," said the Professor. "No immediate hurry; an hour hence will do."

But in spite of this condescension on the part of the man of science, some hours had to elapse before any place of retreat could be discovered likely to suit his requirements; but at length a little nook was found in the side of the cavern just large enough to hold an armchair and a table, and in this the astronomer was soon ensconced to his entire satisfaction.

Buried thus, nearly 900 feet below ground, the Gallians ought to have had unbounded mental energy to furnish an adequate reaction to the depressing monotony of their existence; but many days would often elapse without any one of them ascending to the surface of the soil, and had it not been for the necessity of obtaining fresh water, it seemed almost probable that there would never have been an effort made to leave the cavern at all.

A few excursions, it is true, were made in the downward direction. The three leaders, with Ben Zoof, made their

way to the lower depths of the crater, not with the design of making any further examination as to the nature of the rock—for although it might be true enough that it contained thirty per cent. of gold, it was as valueless to them as granite—but with the intention of ascertaining whether the subterranean fire still retained its activity. Satisfied upon this point, they came to the conclusion that the eruption which had so suddenly ceased in one spot had certainly broken out in another.

February, March, April, May, passed wearily by ; but day succeeded to day with such gloomy sameness that it was little wonder that no notice was taken of the lapse of time. The people seemed rather to vegetate than to live, and their want of vigour became at times almost alarming. The readings around the long table ceased to be attractive, and the debates, sustained by few, became utterly wanting in animation. The Spaniards could hardly be roused to quit their beds, and seemed to have scarcely energy enough to eat. The Russians, constitutionally of more enduring temperament, did not give way to the same extent, but the long and drear confinement was beginning to tell upon them all. Servadac, the Count, and the Lieutenant all knew well enough that it was the want of air and exercise that was the cause of much of this mental depression ; but what could they do ? The most serious remonstrances on their part were entirely in vain. In fact, they themselves occasionally fell a prey to the same lassitude both of body and mind. Long fits of drowsiness, combined with an utter aversion to food, would come over them. It almost seemed as if their entire nature had become degenerate, and that, like tortoises, they could sleep and fast till the return of summer.

Strange to say, little Nina bore her hardships more bravely than any of them. Flitting about, coaxing one to eat, another to drink, rousing Pablo as often as he seemed yielding to the common languor, the child became the life of the party. Her merry prattle enlivened the gloom of

the grim cavern like the sweet notes of a bird ; her gay Italian songs broke the monotony of the depressing silence ; and almost unconscious as the half-dormant population of Gallia were of her influence, they still would have missed her bright presence sorely.

The months still glided on ; how, it seemed impossible for the inhabitants of the living tomb to say. There was a dead level of dulness.

At the beginning of June the general torpor appeared slightly to relax its hold upon its victims. This partial revival was probably due to the somewhat increased influence of the sun, still far, far away.

During the first half of the Gallian year, Lieutenant Procope had taken careful note of Rosette's monthly announcements of the comet's progress, and he was able now, without reference to the Professor, to calculate the rate of advance on its way back towards the sun. He found that Gallia had re-crossed the orbit of Jupiter, but was still at the enormous distance of 197,000,000 leagues from the sun, and he reckoned that in about four months it would have entered the zone of the telescopic planets.

Gradually, but uninterruptedly, life and spirits continued to revive, and by the end of the month Servadac and his little colony had regained most of their ordinary physical and mental energies. Ben Zoof, in particular, roused himself with redoubled vigour, like a giant refreshed from his slumbers. The visits, consequently, to the long-neglected galleries of Nina's Hive became more and more frequent.

One day an excursion was made to the shore. It was still bitterly cold, but the atmosphere had lost nothing of its former stillness, and not a cloud was visible from horizon to zenith. The old footmarks were all as distinct as on the day in which they had been imprinted, and the only portion of the shore where any change was apparent was in the little creek. Here the elevation of the ice had gone on increasing, until the schooner and the tartan had been

uplifted to a height of 150 feet, not only rendering them quite inaccessible, but exposing them to all but certain destruction in the event of a thaw.

Isaac Hakkabut, immovable from the personal oversight of his property in the cavern, had not accompanied the party, and consequently was in blissful ignorance of the fate that threatened his vessel.

"A good thing the old fellow wasn't there to see," observed Ben Zoof; "he would have screamed like a peacock. What a misfortune it is," he added, speaking to himself, "to have a peacock's voice, without its plumage!"

During the months of July and August, Gallia advanced 164,000,000 leagues along her orbit. At night the cold was still intense, but in the daytime the sun, here full upon the equator, caused an appreciable difference of 20° in the temperature. Like birds, the population spent whole days exposed to its grateful warmth, rarely returning till nightfall to the shade of their gloomy home.

This spring-time, if such it may be called, had a most enlivening influence upon all. Hope and courage revived as day by day the sun's disc expanded in the heavens, and every evening the earth assumed a greater magnitude amongst the fixed stars. It was distant yet, but the goal was cheerfully in view.

"I can't believe that yonder little speck of light contains my mountain of Montmartre," said Ben Zoof, one night, after he had been gazing long and steadily at the far-off world.

"You will, I hope, some day find out that it does," answered his master.

"I hope so," said the orderly, without moving his eye from the distant sphere.

After meditating a while, he spoke again:

"I suppose Professor Rosette couldn't make his comet go straight back, could he?"

"Hush!" cried Servadac.

Ben Zoof understood the correction.

"No," continued the Captain ; " it is not for man to disturb the order of the universe. That belongs to a Higher Power than ours ! "

CHAPTER XV

THE PROFESSOR PERPLEXED

Another month passed away, and it was now September, but it was still impossible to leave the warmth of the subterranean retreat for the more airy and commodious quarters of the Hive, where " the bees " would certainly have been frozen to death in their cells. It was altogether quite as much a matter of congratulation as of regret that the volcano showed no symptoms of resuming its activity ; for although a return of the eruption might have rendered their former resort again habitable, any sudden outbreak would have been disastrous to them where they were, the crater being the sole outlet by which the burning lava could escape.

" A wretched time we have had for the last seven months," said the orderly one day to his master ; " but what a comfort little Nina has been to us all ! "

" Yes, indeed," replied Servadac ; " she is a charming little creature. I hardly know how we should have got on without her."

" What is to become of her when we arrive back at the earth ? "

" Not much fear, Ben Zoof, but that she will be well taken care of. Perhaps you and I had better adopt her."

" Ay, yes," assented the orderly. " You can be her father, and I can be her mother."

Servadac laughed.

" Then you and I shall be man and wife."

" We have been as good as that for a long time," observed Ben Zoof, gravely.

By the beginning of October, the temperature had so far moderated that it could scarcely be said to be intolerable. The comet's distance was scarcely three times as great from the sun as the earth from the sun, so that the thermometer rarely sank beyond 35° below zero. The whole party began to make almost daily visits to the Hive, and frequently proceeded to the shore, where they resumed their skating exercise, rejoicing in their recovered freedom like prisoners liberated from a dungeon. Whilst the rest were enjoying their recreation, Servadac and the Count would hold long conversations with Lieutenant Procope about their present position and future prospects, discussing all manner of speculations as to the results of the anticipated collision with the earth, and wondering whether any measures could be devised for mitigating the violence of a shock which might be terrible in its consequences, even if it did not entail a total annihilation of themselves.

There was no visitor to the Hive more regular than Rosette. He had already directed his telescope to be moved back to his former observatory, where, as much as the cold would permit him, he persisted in making his all-absorbing studies of the heavens.

The result of these studies no one ventured to inquire ; but it became generally noticed that something was very seriously disturbing the Professor's equanimity. Not only would he be seen toiling more frequently up the arduous way that lay between his nook below and his telescope above, but he would be heard muttering in an angry tone that indicated considerable agitation.

One day, as he was hurrying down to his study, he met Ben Zoof, who, secretly entertaining a feeling of delight at the Professor's manifest discomfiture, made some casual remark about things not being very straight. The way in which his advance was received the good orderly never divulged, but henceforward he maintained the firm conviction that there was something very much amiss up in the sky.

To Servadac and his friends this continual disquietude and ill-humour on the part of the Professor occasioned no little anxiety. From what, they asked, could his dissatisfaction arise? They could only conjecture that he had discovered some flaw in his reckonings; and if this were so, might there not be reason to apprehend that their anticipations of coming into contact with the earth, at the settled time, might all be falsified?

Day followed day, and still there was no cessation of the Professor's discomposure. He was the most miserable of mortals. If really his calculations and his observations were at variance, this, in a man of his irritable temperament, would account for his perpetual perturbation. But he entered into no explanation; he only climbed up to his telescope, looking haggard and distressed, and when compelled by the frost to retire, he would make his way back to his study more furious than ever.

At times he was heard giving vent to his vexation:

"Confound it! what does it mean? what is she doing? All behind! Is Newton a fool? The laws of gravity seem topsy-turvy! Observations! Calculations! Not agree? Plague! Confound it! Curses!"

And the little man would seize his head in both his hands, and tear away at the scanty locks which he could ill afford to lose.

Enough was overheard to confirm the suspicion that there was some irreconcilable discrepancy between the results of his computation and what he had actually observed, and yet, if he had been called upon to say, he would have sooner insisted that there was derangement in the laws of celestial mechanism, than have owned there was the least probability of error in any of his own calculations.

Assuredly, if the poor Professor had had any flesh to lose he would have withered away to a shadow.

But this state of things was before long to come to an end.

On the 12th, Ben Zoof, who was hanging about outside

the great hall of the cavern, heard the Professor inside utter a loud cry. Hurrying in to ascertain the cause, he found Rosette in a state of perfect frenzy, in which ecstasy and rage seemed to be struggling for the predominance.

"Eureka ! Eureka !" yelled the excited astronomer.

"What, in the name of peace, do you mean ?" bawled Ben Zoof, in open-mouthed amazement.

"Eureka !" again shrieked the little man.

"How ? What ? Where ?" roared the bewildered orderly.

"Eureka ! I say," repeated Rosette ; "and if you don't understand me, you may go to the devil !"

Without availing himself of this polite invitation, Ben Zoof betook himself to his master.

"Something has happened to the Professor," he said ; "he is rushing about like a madman, screeching and yelling, 'Eureka' !"

"Eureka ?" exclaimed Servadac. "That means he has made a discovery" ; and, full of anxiety, he hurried off to meet the Professor.

But, however great was his desire to ascertain what this discovery implied, his curiosity was not yet destined to be gratified. The Professor kept muttering in incoherent phrases : "Rascal ! he shall pay for it yet. I will be even with him ! Cheat ! Thrown me out !" But he did not vouchsafe any reply to Servadac's inquiries, and withdrew to his study.

But from that day forward Rosette, for some reason at present incomprehensible, quite altered his behaviour to Isaac Hakkabut, a man for whom he had always hitherto evinced the greatest repugnance and contempt. All at once he began to show a remarkable interest in the Jew and his affairs, paying several visits to the dark little storehouse, making inquiries as to the state of business and expressing some solicitude about the state of the exchequer.

The wily Jew was taken somewhat by surprise, but came to an immediate conclusion that the Professor was

contemplating borrowing some money ; he was consequently very cautious in all his replies.

It was not Hakkabut's habit ever to advance a loan except at an extravagant rate of interest, or without demanding far more than an adequate security. Count Timascheff, a Russian nobleman, was evidently rich ; to him, perhaps, for a proper consideration, a loan might be made : Captain Servadac was a Gascon, and Gascons are proverbially poor ; it would never do to lend any money to him : but here was a professor, a mere man of science, with circumscribed means ; did *he* expect to borrow ? Certainly Isaac would as soon think of flying, as of lending money to him.

Such were the thoughts that made him receive all Rosette's approaches with a careful reservation.

It was not long, however, before Hakkabut was to be called upon to apply his money to a purpose for which he had not reckoned.

In his eagerness to effect sales, he had parted with all the alimentary articles in his cargo without having the precautionary prudence to reserve enough for his own consumption. Amongst other things that failed him was his stock of coffee, and as coffee was a beverage without which he deemed it impossible to exist, he found himself in considerable perplexity.

He pondered the matter over for a long time, and ultimately persuaded himself that, after all, the stores were the common property of all, and that he had as much right to a share as anyone else. Accordingly, he made his way to Ben Zoof, and, in the most amiable tone he could assume, begged as a favour that he would let him have a pound of coffee.

The orderly shook his head dubiously.

" A pound of coffee, old Nathan ? I can't say."

" Why not ? You have some ? " said Isaac.

" Oh yes ! plenty—a hundred kilogrammes."

" Then let me have one pound. I shall be grateful."

"Hang your gratitude !"

"Only one pound ! You would not refuse anybody else."

"That's just the very point, old Samuel ; if you were anybody else, I should know very well what to do. I must refer the matter to his Excellency."

"Oh, his Excellency will do me justice."

"Perhaps you will find his justice rather too much for you."

And with this consoling remark, the orderly went to seek his master.

Rosette meanwhile had been listening to the conversation, and was secretly rejoicing that an opportunity for which he had been watching had now arrived.

"What's the matter, Master Isaac ? Have you parted with all your coffee ?" he asked, in a sympathising voice, when Ben Zoof was gone.

"Ah ! yes, indeed," groaned Hakkabut ; "and now I require some for my own use. In my little black hole I cannot live without my coffee."

"Of course you cannot," agreed the Professor.

"And don't you think the Governor ought to let me have it ?"

"No doubt."

"Oh, I must have coffee," said the Jew again.

"Certainly, certainly," the Professor assented. "Coffee is nutritious ; it warms the blood. How much do you want ?"

"A pound. A pound will last me a long time."

"And who will weigh it for you ?" asked Rosette, scarcely able to conceal the eagerness that prompted the question.

"Why, they will weigh it with my steelyard, of course. There is no other balance here."

And as the Jew spoke, the Professor fancied he could detect the faintest of sighs.

"Good, Master Isaac ; all the better for you ! You will get your seven pounds instead of one !"

"Yes ; well, seven, or thereabouts—thereabouts," stammered the Jew with considerable hesitation.

Rosette scanned his countenance narrowly, and was about to probe him with further questions, when Ben Zoof returned.

"And what does his Excellency say?" inquired Hakkabut.

"Why, Nehemiah, he says he shan't give you any."

"Merciful heavens!" began the Jew.

"He says he doesn't mind selling you a little."

"But, by the holy city, why does he make me pay for what anybody else could have for nothing?"

"As I told you before, you are not anybody else ; so, come along. You can afford to buy what you want. We should like to see the colour of your money."

"Merciful heavens!" the old man whined once more.

"Now, none of that! Yes or no? If you are going to buy, say so at once ; if not, I shall shut up shop."

Hakkabut knew well enough that the orderly was not a man to be trifled with, and said, in a tremulous voice :

"Yes, I will buy."

The Professor, who had been looking on with much interest, betrayed manifest symptoms of satisfaction.

"How much do you want? What will you charge for it?" asked Isaac, mournfully, putting his hand into his pocket and chinking his money.

"Oh, we will deal gently with you. We will not make any profit. You shall have it for the same price that we paid for it. Ten francs a pound, you know."

The Jew hesitated.

"Come now, what is the use of your hesitating? Your gold will have no value when you go back to the world."

"What do you mean?" asked Hakkabut, startled.

"You will find out some day," answered Ben Zoof, significantly.

Hakkabut drew out a small piece of gold from his pocket,

took it close under the lamp, rolled it over in his hand, and pressed it to his lips.

"Shall you weigh me the coffee with my steelyard?" he asked, in a quavering voice that confirmed the Professor's suspicions.

"There is nothing else to weigh it with; you know that well enough, old Shechem," said Ben Zoof.

The steelyard was then produced; a tray was suspended to the hook, and upon this coffee was thrown until the needle registered the weight of one pound. Of course, it took seven pounds of coffee to do this.

"There you are! There's your coffee, man!" Ben Zoof said.

"Are you sure?" inquired Hakkabut, peering down close to the dial. "Are you quite sure that the needle touches the point?"

"Yes; look and see."

"Give it a little push, please."

"Why?"

"Because—because——"

"Well, because of what?" cried the orderly, impatiently.

"Because I think, perhaps—I am not quite sure—perhaps the steelyard is not quite correct."

The words were not uttered before the Professor, fierce as a tiger, had rushed at the Jew, had seized him by the throat, and was shaking him till he was black in the face.

"Help! help!" screamed Hakkabut. "I shall be strangled."

"Rascal! consummate rascal! thief! villain!" the Professor reiterated, and continued to shake the Jew furiously.

Ben Zoof looked on and laughed, making no attempt to interfere; he had no sympathy with either of the two.

The sound of the scuffling, however, drew the attention of Servadac, who, followed by his companions, hastened to the scene. The combatants were soon parted.

"What is the meaning of all this?" demanded the Captain.

As soon as the Professor had recovered his breath, exhausted by his exertions, he said :

"The reprobate, the rascal has cheated us ! His steelyard is wrong ! He is a thief !"

Captain Servadac looked sternly at Hakkabut.

"How is this, Hakkabut ? Is this a fact ?"

"No, no—yes—no, your Excellency, only——"

"He is a cheat, a thief !" roared the excited astronomer.
"His weights deceive !"

"Stop, stop !" interposed Servadac ; "let us hear. Tell me, Hakkabut——"

"The steelyard lies ! It cheats ! it lies !" roared the irrepressible Rosette.

"Tell me, Hakkabut, I say," repeated Servadac.

The Jew only kept on stammering, "Yes—no—I don't know."

But heedless of any interruption, the Professor continued :

"False weights ! That confounded steelyard ! It gave a false result ! The mass was wrong ! The observations contradicted the calculations ; they were wrong ! She was out of place ! Yes, out of place entirely."

"What !" cried Servadac and Procope in a breath, "out of place ?"

"Yes, completely," said the Professor.

"Gallia out of place ?" repeated Servadac, agitated with alarm.

"I did not say Gallia," replied Rosette, stamping his foot impetuously ; "I said Nerina."

"Oh, Nerina," answered Servadac. "But what of Gallia ?" he inquired, still nervously.

"Gallia, of course, is on her way to the earth. I told you so. But that Jew is a rascal !"

*CHAPTER XVI**A JOURNEY AND A DISAPPOINTMENT*

It was as the Professor had said. From the day that Isaac Hakkabut had entered upon his mercantile career, his dealings had all been carried on by a system of false weight. That deceitful steelyard had been the mainspring of his fortune. But when it had become his lot to be the purchaser instead of the vendor, his spirit had groaned within him at being compelled to reap the fruits of his own dishonesty. No one who had studied his character could be much surprised at the confession that was extorted from him, that for every supposed kilogramme that he had ever sold the true weight was only 750 grammes, or just five and twenty per cent. less than it ought to have been.

The Professor, however, had ascertained all that he wanted to know. By estimating his comet at a third as much again as its proper weight, he had found that his calculations were always at variance with the observed situation of the satellite, which was immediately influenced by the mass of its primary.

But now, besides enjoying the satisfaction of having punished old Hakkabut, Rosette was able to recommence his calculations with reference to the elements of Nerina upon a correct basis, a task to which he devoted himself with redoubled energy.

It will be easily imagined that Isaac Hakkabut, thus caught in his own trap, was jeered most unmercifully by those whom he had attempted to make his dupes. Ben Zoof, in particular, was never wearied of telling him how on his return to the world he would be prosecuted for using false weights, and would certainly become acquainted with the inside of a prison. Thus badgered, he secluded himself more than ever in his dismal hole, never venturing, except when absolutely obliged, to face the other members of the community.

On the 7th of October the comet re-entered the zone of the telescopic planets, one of which had been captured as a satellite, and the origin of the whole of which is most probably correctly attributed to the disintegration of some large planet that formerly revolved between the orbits of Mars and Jupiter.

By the beginning of the following month half of this zone had been traversed, and only two months remained before the collision with the earth was to be expected. During the month Gallia would travel 40,000,000 leagues along her orbit, and would approach to within 78,000,000 leagues of the sun.

The temperature was now rarely below 12° below zero, but that was far too cold to permit the slightest symptoms of a thaw. The surface of the sea remained as frozen as ever, and the two vessels, high up on their icy pedestals, remained unaltered in their critical position.

It was about this time that the question began to be mooted whether it would not be right to re-open some communication with the Englishmen at Gibraltar. Not that any doubt was entertained as to their having been able successfully to cope with the rigours of the winter ; but Captain Servadac, in a way that did honour to his generosity, represented that, however uncourteous might have been their former behaviour, it was at least due to them that they should be informed of the true condition of things, which they had had no opportunity of learning ; and, moreover, that they should be invited to co-operate with the population of Nina's Hive, in the event of any measures being suggested by which the shock of the approaching collision could be mitigated.

The Count and the Lieutenant both heartily concurred in Servadac's sentiments of humanity and prudence, and all agreed that if the intercourse were to be opened at all, no time could be so suitable as the present, while the surface of the sea presented a smooth and solid footing. After a thaw should set in, neither the yacht nor the tartan could

be reckoned on for service, and it would be inexpedient to make use of the steam-launch, for which only a few tons of coal had been reserved, just sufficient to convey them to Gourbi Island when the occasion should arise ; whilst as to the yawl, which, transformed into a sledge, had performed so successful a trip to Formentera, the absence of wind would make that quite unavailable. It was true that with the return of summer temperature, there would be certain to be a derangement in the atmosphere of Gallia which would result in wind, but for the present the air was altogether too still for the yawl to have any prospects of making its way to Gibraltar.

The only question remaining was as to the possibility of going on foot. The distance was somewhere about 240 miles. Captain Servadac declared himself quite equal to the undertaking. To skate sixty or seventy miles a day would be nothing, he said, to a practical skater like himself. The whole journey there and back might be performed in eight days. Provided with a compass, a sufficient supply of cold meat, and a spirit-lamp, by which he might boil his coffee, he was perfectly sure he should, without the least difficulty, accomplish an enterprise that chimed in so exactly with his adventurous spirit.

Equally urgent were both the Count and the Lieutenant to be allowed to accompany him ; nay, they even offered to go instead ; but Servadac, expressing himself as most grateful for their consideration, declined their offer, and avowed his resolution of taking no other companion than his own orderly.

Highly delighted at his master's decision, Ben Zoof expressed his satisfaction at the prospect of "stretching his legs a bit," declaring that nothing could induce him to permit the Captain to go alone.

There was no delay. The departure was fixed for the following morning, the 2nd of November.

Although it is not to be questioned that a genuine desire of doing an act of kindness to his fellow-creatures was a

leading motive of Servadac's proposed visit to Gibraltar, it must be owned that another idea, confided to nobody, least of all to Count Timascheff, had been conceived in the brain of the worthy Gascon. Ben Zoof had an inkling that his master was "up to some other little game," when, just before starting, he asked him privately whether there was a French tricolour among the stores.

"I believe so," said the orderly.

"Then don't say a word to anyone, but fasten it up tight in your knapsack."

Ben Zoof found the flag, and folded it up as he was directed.

Before proceeding to explain this somewhat enigmatical conduct of Servadac, it is necessary to refer to a certain physiological fact, coincident but unconnected with celestial phenomena, originating entirely in the frailty of human nature. The nearer that Gallia approached the earth, the more a sort of reserve began to spring up between the Captain and Count Timascheff. Though they could not be said to be conscious of it, the remembrance of their former rivalry, so completely buried in oblivion for the last year and ten months, was insensibly recovering its hold upon their minds, and the question was all but coming to the surface as to what would happen if, on their return to earth, the handsome Madame de L—— should still be free. From companions in peril, would they not again be avowed rivals? Conceal it as they would, a coolness was undeniably stealing over an intimacy which, though it could never be called affectionate, had been uniformly friendly and courteous.

Under these circumstances, it was not surprising that Hector Servadac should not have confided to the Count a project which, wild as it was, could scarcely have failed to widen the unacknowledged breach that was opening in their friendship.

The project was this: it was the annexation of Ceuta to the French dominion. The Englishmen, rightly enough,

had continued to occupy the fragment of Gibraltar, and their claim was indisputable. But the island of Ceuta, which before the shock had commanded the opposite side of the strait, and had been occupied by Spaniards, had since been abandoned, and was therefore free to the first occupant who should lay claim to it. To plant the tricolour upon it, in the name of France, was now the cherished wish of Servadac's heart.

"Who knows," he said to himself, "whether Ceuta, on its return to earth, may not occupy a grand and commanding situation? What a proud thing it would be to have secured its possession to France!"

Next morning, as soon as they had taken their brief farewell of their friends, and were fairly out of sight of the shore, Servadac imparted his design to Ben Zoof, who entered into the project with the greatest zest, and expressed himself delighted, not only at the prospect of adding to the dominions of his beloved country, but of stealing a march upon England. Then, as though he was marching on to conquest, he gave vent to his enthusiasm by chanting one of his old military refrains:

"Onward, Zephyrs,¹ at daylight's bloom,
Tramp, tramp, tramp!
Forward, Zephyrs, in evening gloom,
Tramp, tramp, tramp!"

Both travellers were warmly clad, the orderly's knapsack containing all the necessary provisions. The journey was accomplished without special incident; halts were made at regular intervals, for the purpose of taking food and rest. The temperature by night as well as by day was quite endurable, and on the fourth afternoon after starting, thanks to the straight course which their compass enabled them to maintain, the adventurers found themselves within a few miles of Ceuta.

As soon as Ben Zoof caught sight of the rock on the

¹ Zephyr: an Algerian soldier.

western horizon, he was all excitement. Just as if he were in a regiment going into action, he talked wildly about "columns" and "squares" and "charges." The Captain, although less demonstrative, was hardly less eager to reach the rock. They both pushed forward with all possible speed till they were within a mile and a half of the shore, when Ben Zoof, who had a very keen vision, stopped suddenly, and said that he was sure he could see something moving on the top of the island.

"Never mind, let us hasten on," said Servadac.

A few minutes carried them over another mile, when Ben Zoof stopped again.

"What is it, Ben Zoof?" asked the Captain.

"It looks to me like a man on the rock, waving his arms in the air," said the orderly.

"Plague on it!" muttered Servadac; "I hope we are not too late."

Again they went on; but soon Ben Zoof stopped for the third time.

"It is a semaphore, sir; I see it quite distinctly."

And he was not mistaken; it had been a telegraph in motion that had caught his eye.

"Plague on it!" repeated the Captain.

"Too late, sir, do you think?" said Ben Zoof.

"Yes, Ben Zoof; if that's a telegraph—and there is no doubt of it—somebody has been before us and erected it; and, moreover, if it is moving, there must be somebody working it now."

He was keenly disappointed.

Looking towards the north, he could distinguish Gibraltar faintly visible in the extreme distance, and upon the summit of the rock both Ben Zoof and himself fancied they could make out another semaphore, giving signals, no doubt, in response to the one here.

"Yes, it is only too clear; they have already occupied it, and established their communications," said Servadac, with a sigh.

"And what are we to do then?" asked Ben Zoof.

"We must pocket our chagrin, and put as good a face on the matter as we can," replied the Captain.

"But perhaps there are only four or five Englishmen to protect the place," said Ben Zoof, as if meditating an assault.

"No, no, Ben Zoof," answered Servadac; "we must do nothing rash. We have had our warning, and, unless our representations can induce them to yield their position, we must resign our hope."

Thus discomfited, they had reached the foot of the rock, when all at once, like a "Jack-in-the-box," a sentinel started up before them with the challenge:

"Who goes there?"

"Friends. Vive la France!" cried the Captain.

"Hurrah for England!" replied the soldier.

By this time four other men had made their appearance from the upper part of the rock.

"What do you want?" asked one of them, whom Servadac remembered to have seen before at Gibraltar.

"Can I speak to your commanding officer?" Servadac inquired.

"Which?" said the man. "The officer in command of Ceuta?"

"Yes, if there is one."

"I will acquaint him with your arrival," answered the Englishman, and disappeared.

In a few minutes the commanding officer, attired in full uniform, was seen descending to the shore. It was Major Oliphant himself.

Servadac could no longer entertain a doubt that the Englishmen had forestalled him in the occupation of Ceuta. Provisions and fuel had evidently been conveyed thither in the boat from Gibraltar before the sea had frozen, and a solid casemate, hollowed in the rock, had afforded Major Oliphant and his contingent ample protection from the rigour of the winter. The ascending

smoke that rose above the rock was sufficient evidence that good fires were still kept up ; the soldiers appeared to have thriven well on what, no doubt, had been a generous diet, and the Major himself, although he would scarcely have been willing to admit it, was slightly stouter than before.

Being only about twelve miles distant from Gibraltar, the little garrison at Ceuta had felt itself by no means isolated in its position ; but by frequent excursions across the frozen strait, and by the constant use of the telegraph, had kept up their communication with their fellow-countrymen on the other island. Colonel Murphy and the Major had not even been forced to forgo the pleasures of the chess-board. The game that had been interrupted by Captain Servadac's former visit was not yet concluded ; but, like the two American clubs that played their celebrated game in 1846 between Washington and Baltimore, the two gallant officers made use of the semaphore to communicate their well-digested moves.

The Major stood waiting for his visitor to speak.

"Major Oliphant, I believe?" said Servadac, with a courteous bow.

"Yes, sir, Major Oliphant, officer in command of the garrison at Ceuta," was the Englishman's reply. "And to whom," he added, "may I have the honour of speaking?"

"To Captain Servadac, the Governor-General of Gallia."

"Indeed!" said the Major, with a supercilious look.

"Allow me to express my surprise," resumed the Captain, "at seeing you installed as commanding officer upon what I have always understood to be Spanish soil. May I demand your claim to your position?"

"My claim is that of first occupant."

"But do you not think that the party of Spaniards now resident with me may at some future time assert a prior right to the proprietorship?"

"I think not, Captain Servadac."

"But why not?" persisted the Captain.

"Because these very Spaniards have, by formal contract, made over Ceuta, in its integrity, to the British Government."

Servadac uttered an exclamation of surprise.

"And as the price of that important cession," continued Major Oliphant, "they have received a fair equivalent in British gold."

"Ah!" cried Ben Zoof, "that accounts for that fellow Negrete and his people having such a lot of money."

Servadac was silent. It had become clear to his mind what had been the object of that secret visit to Ceuta which he had heard of as being made by the two English officers. The arguments that he had intended to use had completely fallen through; all that he had now to do was carefully to prevent any suspicion of his disappointed project.

"May I be allowed to ask, Captain Servadac, to what I am indebted for the honour of this visit?" asked Major Oliphant presently.

"I have come, Major Oliphant, in the hope of doing you and your companions a service," replied Servadac, rousing himself from his reverie.

"Ah, indeed!" replied the Major, as though he felt himself quite independent of all services from exterior sources.

"I thought, Major, that it was not unlikely you were in ignorance of the fact that both Ceuta and Gibraltar have been traversing the solar regions on the surface of a comet."

The Major smiled incredulously; but Servadac, nothing daunted, went on to detail the results of the collision between the comet and the earth, adding that, as there was the almost immediate prospect of another concussion, it had occurred to him that it might be advisable for the whole population of Gallia to unite in taking precautionary measures for the common welfare.

"In fact, Major Oliphant," he said in conclusion, "I

am here to inquire whether you and your friends would be disposed to join us in our present quarters."

"I am obliged to you, Captain Servadac," answered the Major stiffly, "but we have not the slightest intention of abandoning our post. We have received no Government orders to that effect; indeed, we have received no orders at all. Our own despatch to the First Lord of the Admiralty still awaits the mail."

"But allow me to repeat," insisted Servadac, "that we are no longer on the earth, although we expect to come in contact with it again in about eight weeks."

"I have no doubt," the Major answered, "that England will make every effort to reclaim us."

Servadac felt perplexed. It was quite evident that Major Oliphant had not been convinced of the truth of one syllable of what he had been saying.

"Then I am to understand that you are determined to retain your two garrisons here and at Gibraltar?" asked Servadac, with one last effort at persuasion.

"Certainly; these two posts command the entrance of the Mediterranean."

"But supposing there is no longer any Mediterranean?" retorted the Captain, growing impatient.

"Oh, England will always take care of that," was Major Oliphant's cool reply. "But excuse me," he added presently; "I see that Colonel Murphy has just telegraphed his next move. Allow me to wish you good afternoon."

And without further parley, followed by his soldiers, he retired into the casemate, leaving Captain Servadac gnawing his moustache with mingled rage and mortification.

"A fine piece of business we have made of this!" said Ben Zoof, when he found himself alone with his master.

"We will make our way back at once," replied Servadac.

"Yes, the sooner the better, with our tails between our legs," rejoined the orderly, who this time felt no inclination to start off to the march of the Algerian Zephyrs.

And so the French tricolour returned as it had set out—in Ben Zoof's knapsack.

On the eighth evening after starting, the travellers again set foot on the volcanic promontory just in time to witness a great commotion.

Palmyrin Rosette was in a furious rage.

He had completed all his calculations about Nerina, but that perfidious satellite had totally disappeared.

The astronomer was frantic at the loss of his moon.

Captured probably by some larger body, it was revolving in its proper zone of the minor planets.

CHAPTER XVII

A BOLD PROPOSITION

On his return Servadac communicated to the Count the result of his expedition, and, though perfectly silent on the result of his personal project, did not conceal the fact that the Spaniards, without the smallest right, had sold Ceuta to the English.

Having refused to quit their post, the Englishmen had virtually excluded themselves from any further consideration ; they had had their warning, and must now take the consequences of their own incredulity.

Although it had proved that not a single creature either at Gourbi Island, Gibraltar, Ceuta, Madalena, or Formentera had received any injury whatever at the time of the first concussion, there was nothing in the least to make it certain that a like immunity from harm would attend the second. The previous escape was doubtless owing to some slight, though unaccountable, modification in the rate of motion ; but whether the inhabitants of the earth had fared so fortunately, was a question that had still to be determined.

The day following Servadac's return, he and the Count and Lieutenant Procope met by agreement in the cave

formally to discuss what would be the most advisable method of proceeding under their present prospects. Ben Zoof was, as a matter of course, allowed to be present, and Professor Rosette had been asked to attend ; but he declined on the plea of taking no interest in the matter. Indeed, the disappearance of his moon had utterly disconcerted him, and the probability that he should soon lose his comet also, plunged him into an excess of grief which he preferred to bear in solitude.

Although the barrier of cool reserve was secretly increasing between the Captain and the Count, they scrupulously concealed any outward token of their inner feelings, and without any personal bias applied their best energies to the discussion of the question which was of such mutual, nay, of such universal interest.

Servadac was the first to speak.

"In fifty-one days, if Professor Rosette has made no error in his calculations, there is to be a recurrence of collision between this comet and the earth. The inquiry that we have now to make is whether we are prepared for the coming shock. I ask myself, and I ask you, whether it is in our power, by any means, to avert the evil consequences that are only too likely to follow ? "

Count Timascheff, in a voice that seemed to thrill with solemnity, said :

"In such events we are at the disposal of an over-ruling Providence ; human precautions cannot sway the Divine will."

"But with the most profound reverence for the will of Providence," replied the Captain, "I beg to submit that it is our duty to devise whatever means we can to escape the threatening mischief. Heaven helps them that help themselves."

"And what means have you to suggest, may I ask ? " said the Count, with a faint accent of satire.

Servadac was forced to acknowledge that nothing tangible had hitherto presented itself to his mind.

"I don't want to intrude," observed Ben Zoof, "but I don't understand why such learned gentlemen as you cannot make the comet go where you want it to go."

"You are mistaken, Ben Zoof, about our learning," said the Captain; "even Professor Rosette, with all his learning, has not a shadow of power to prevent the comet and the earth from knocking against each other."

"Then I cannot see what is the use of all this learning," the orderly replied.

"One great use of learning," said Count Timascheff with a smile, "is to make us know our own ignorance."

While this conversation had been going on, Lieutenant Procope had been sitting in thoughtful silence. Looking up, he now said :

"Incident to this expected shock, there may be a variety of dangers. If, gentlemen, you will allow me, I will enumerate them; and we shall, perhaps, by taking them *seriatim*, be in a better position to judge whether we can successfully grapple with them, or in any way mitigate their consequences."

There was a general attitude of attention. It was surprising how calmly they proceeded to discuss the circumstances that looked so threatening and ominous.

"First of all," resumed the Lieutenant, "we will specify the different ways in which the shock may happen."

"And the prime fact to be remembered," interposed Servadac, "is that the combined velocity of the two bodies will be about 21,000 miles an hour."

"Express speed, and no mistake!" muttered Ben Zoof.

"Just so," assented Procope. "Now, the two bodies may impinge either directly or obliquely. If the impact is sufficiently oblique, Gallia may do precisely what she did before: she may graze the earth; she may, or she may not, carry off a portion of the earth's atmosphere and substance, and so she may float away again into space; but her orbit would undoubtedly be deranged, and if we

survive the shock, we shall have small chance of ever returning to the world of our fellow-creatures."

"Professor Rosette, I suppose," Ben Zoof remarked, "would pretty soon find out all about that."

"But we will leave this hypothesis," said the Lieutenant; "our own experience has sufficiently shown us its advantages and its disadvantages. We will proceed to consider the infinitely more serious alternative of direct impact; of a shock that would hurl the comet straight on to the earth, to which it would become attached."

"A great wart upon her face!" said Ben Zoof, laughing.

The Captain held up his finger to his orderly, making him understand that he should hold his tongue.

"It is, I presume, to be taken for granted," continued Lieutenant Procope, "that the mass of the earth is comparatively so large that, in the event of a direct collision, her own motion would not be sensibly retarded, and that she would carry the comet along with her, as part of herself."

"Very little question of that, I should think," said Servadac.

"Well, then," the Lieutenant went on, "what part of this comet of ours will be the part to come into collision with the earth? It may be the equator, where we are; it may be at the exactly opposite point, at our antipodes; or it may be at either pole. In any case, it seems hard to foresee whence there is to come the faintest chance of deliverance."

"Is the case so desperate?" asked Servadac.

"I will tell you why it seems so. If the side of the comet on which we are resident impinges on the earth, it stands to reason that we must be crushed to atoms by the violence of the concussion."

"Regular mincemeat!" said Ben Zoof, whom no admonitions could quite reduce to silence.

"And if," said the Lieutenant, after a moment's pause, and the slightest possible frown at the interruption—"and

if the collision should occur at our antipodes, the sudden check to the velocity of the comet would be quite equivalent to a shock *in situ* ; and, another thing, we should run the risk of being suffocated, for all our comet's atmosphere would be assimilated with the terrestrial atmosphere, and we, supposing we were not dashed to atoms, should be left as it were upon the summit of an enormous mountain (for such to all intents and purposes Gallia would be), 450 miles above the level of the surface of the globe, without a particle of air to breathe."

"But would not our chances of escape be considerably better," asked Count Timascheff, "in the event of either of the comet's poles being the point of contact?"

"Taking the combined velocity into account," answered the Lieutenant, "I confess that I fear the violence of the shock will be too great to permit our destruction to be averted."

A general silence ensued, which was broken by the Lieutenant himself.

"Even if none of these contingencies occur in the way we have contemplated, I am driven to the suspicion that we shall be burnt alive."

"Burnt alive!" they all exclaimed in a chorus of horror.

"Yes. If the deductions of modern science be true, the speed of the comet, when suddenly checked, will be transmuted into heat, and that heat will be so intense that the temperature of the comet will be raised to some millions of degrees."

No one having anything definite to allege in reply to Lieutenant Procope's forebodings, they all relapsed into silence.

Presently Ben Zoof asked whether it was not possible for the comet to fall into the middle of the Atlantic.

Procope shook his head.

"Even so, we should only be adding the fate of drowning to the list of our other perils."

"Then, as I understand," said Captain Servadac, "in

whatever way or in whatever place the concussion occurs, we must be either crushed, suffocated, roasted, or drowned. Is that your conclusion, Lieutenant ? ”

“ I confess I see no other alternative,” answered Procope, calmly.

“ But isn’t there another thing to be done ? ” said Ben Zoof.

“ What do you mean ? ” his master asked.

“ Why, to get off the comet before the shock comes.”

“ How could you get off Gallia ? ”

“ That I can’t say,” replied the orderly.

“ I am not sure that that could not be accomplished,” said the Lieutenant.

All eyes in a moment were riveted upon him, as, with his head resting on his hands, he was manifestly cogitating a new idea.

“ Yes, I think it could be accomplished,” he repeated.

“ The project may appear extravagant, but I do not know why it should be impossible. Ben Zoof has hit the right nail on the head ; we must try and leave Gallia before the shock.”

“ Leave Gallia ! How ? ” said Count Timascheff.

The Lieutenant did not at once reply. He continued pondering for a time, and at last said, slowly and distinctly :

“ By making a balloon ! ”

Servadac’s heart sank.

“ A balloon ! ” he exclaimed. “ Out of the question ! Balloons are exploded things. You hardly find them in novels. Balloon, indeed ! ”

“ Listen to me,” replied Procope. “ Perhaps I can convince you that my idea is not so chimerical as you imagine.”

And, knitting his brow, he proceeded to establish the feasibility of his plan.

“ If we can ascertain the precise moment when the shock is to happen, and can succeed in launching ourselves a sufficient time beforehand into Gallia’s atmosphere, I

believe it will transpire that this atmosphere will amalgamate with that of the earth, and that a balloon whirled along by the combined velocity would glide into the mingled atmosphere and remain suspended in mid-air until the shock of the collision is overpast."

Count Timascheff reflected for a minute, and said :

" I think, Lieutenant, I understand your project. The scheme seems tenable ; and I shall be ready to co-operate with you, to the best of my power, in putting it into execution."

" Only, remember," continued Procope, " there are many chances to one against our success. One instant's obstruction and stoppage in our passage, and our balloon is burnt to ashes. Still, reluctant as I am to acknowledge it, I confess that I feel our sole hope of safety rests in our getting free from this comet."

" If the chances were ten thousand to one against us," said Servadac, " I think the attempt ought to be made."

" But have we hydrogen enough to inflate a balloon ? " asked the Count.

" Hot air will be all that we shall require," the Lieutenant answered ; " we are only contemplating about an hour's journey."

" Ah, a fire balloon ! A montgolfier ! " cried Servadac. " But what are you going to do for a casing ? "

" I have thought of that. We must cut it out of the sails of the *Dobryna* ; they are both light and strong," rejoined the Lieutenant.

Count Timascheff complimented the Lieutenant upon his ingenuity, and Ben Zoof could not resist bringing the meeting to a conclusion by a ringing cheer.

Truly daring was the plan of which Lieutenant Procope had thus become the originator ; but the very existence of them all was at stake, and the design must be executed resolutely.

For the success of the enterprise it was absolutely necessary to know, almost to a minute, the precise time at

which the collision would occur, and Captain Servadac undertook the task, by gentle means or by stern, of extracting the secret from the Professor.

To Lieutenant Procope himself was entrusted the superintendence of the construction of the montgolfier, and the work was begun at once. It was to be large enough to carry the whole of the twenty-three residents in the volcano, and, in order to provide the means of floating aloft long enough to give time for selecting a proper place for descent, the Lieutenant was anxious to make it carry enough hay or straw to maintain combustion for a while, and keep up the necessary supply of heated air.

The sails of the *Dobryna*, which had all been carefully stowed away in the Hive, were of a texture unusually close, and quite capable of being made airtight by means of a varnish, the ingredients of which were rummaged out of the promiscuous stores of the tartan. The Lieutenant himself traced out the pattern and cut out the strips, and all hands were employed in seaming them together. It was hardly the work for little fingers, but Nina persisted in accomplishing her own share of it. The Russians were quite at home at occupation of this sort, and having initiated the Spaniards into its mysteries, the task of joining together the casing was soon complete. Isaac Hakkabut and the Professor were the only two members of the community who took no part in this somewhat tedious proceeding.

A month passed away, but Servadac found no opportunity of getting at the information he had pledged himself to gain. On the sole occasion when he had ventured to broach the subject with the astronomer, he had received for answer that as there was no hurry to get back to the earth, there need be no concern about any dangers of transit.

Indeed, as time passed on, the Professor seemed to become more and more inaccessible. A pleasant temperature enabled him to live entirely in his observatory, from

which intruders were rigidly shut out. But Servadac bided his time. He grew more and more impressed with the importance of finding out the exact moment at which the impact would take place, but was content to wait for a promising opportunity to put any fresh questions on the subject to the too reticent astronomer.

Meanwhile, the earth's disc was daily increasing in magnitude ; the comet travelled 50,000,000 leagues during the month, at the close of which it was not more than 78,000,000 leagues from the sun.

A thaw had now fairly set in. The breaking up of the frozen ocean was a magnificent spectacle, and " the great voice of the sea," as the whalers graphically describe it, was heard in all its solemnity. Little streams of water began to trickle down the declivities of the mountain and along the shelving shore, only to be transformed, as the melting of the snow continued, into torrents of cascades. Light vapours gathered on the horizon, and clouds were formed and carried rapidly along by breezes to which the Gallian atmosphere had long been unaccustomed. All these were doubtless but the prelude to atmospheric disturbances of a more startling character ; but as indications of returning spring, they were greeted with a welcome which no apprehensions for the future could prevent being glad and hearty.

A double disaster was the inevitable consequence of the thaw. Both the schooner and the tartan were entirely destroyed. The basement of the icy pedestal on which the ships had been upheaved was gradually undermined, like the icebergs of the Arctic Ocean, by warm currents of water, and on the night of the 12th the huge block collapsed *en masse*, so that on the following morning nothing remained of the *Dobryna* and the *Hansa* except the fragments scattered on the shore.

Although certainly expected, the catastrophe could not fail to cause a sense of general depression. Well-nigh one of their last ties to Mother Earth had been broken : the

ships were gone, and they had only a balloon to replace them !

To describe Isaac Hakkabut's rage at the destruction of the tartan would be impossible. His oaths were simply dreadful ; his imprecations on the accursed race were full of wrath. He swore that Servadac and his people were responsible for his loss ; he vowed that they should be sued and made to pay him damages ; he asserted that he had been brought from Gourbi Island only to be plundered ; in fact, he became so intolerably abusive, that Servadac threatened to put him into irons unless he conducted himself properly ; whereupon the Jew, finding that the Captain was in earnest, and would not hesitate to carry the threat into effect, was fain to hold his tongue, and slunk back into his dim hole.

By the 14th the balloon was finished, and, carefully sewn and well varnished as it had been, it was really a very substantial structure. It was covered with a network that had been made from the light rigging of the yacht, and the car, composed of wicker-work that had formed partitions in the hold of the *Hansa*, was quite commodious enough to hold the twenty-three passengers it was intended to convey. No thought had been bestowed upon comfort or convenience, as the ascent was to last for so short a time, merely long enough for making the transit from atmosphere to atmosphere.

The necessity was becoming more and more urgent to get at the true hour of the approaching contact, but the Professor seemed to grow more obstinate than ever in his resolution to keep his secret.

On the 15th the comet crossed the orbit of Mars, at the safe distance of 56,000,000 leagues ; but during that night the community thought that their last hour had taken them unawares. The volcano rocked and trembled with the convulsions of internal disturbance, and Servadac and his companions, convinced that the mountain was doomed to some sudden disruption, rushed into the open air.

The first object that caught their attention as they emerged upon the open rocks was the unfortunate Professor, who was scrambling down the mountain-side, piteously displaying a fragment of his shattered telescope.

It was no time for condolence.

A new marvel arrested every eye. A fresh satellite, in the gloom of night, was shining conspicuously before them.

That satellite was a part of Gallia itself !

By the expansive action of the inner heat, Gallia, like Gambart's comet, had been severed in twain ; an enormous fragment had been detached and launched into space !

The fragment included Ceuta and Gibraltar, with the two English garrisons !

CHAPTER XVIII

THE VENTURE MADE

What would be the consequences of this sudden and complete disruption, Servadac and his people hardly dared to think.

The first change that came under their observation was the rapidity of the sun's appearances and disappearances, forcing them to the conviction that although the comet still rotated on its axis from east to west, yet the period of its rotation had been diminished by about one-half. Only six hours instead of twelve elapsed between sunrise and sunrise ; three hours after rising in the west the sun was sinking again in the east.

" We are coming to something ! " exclaimed Servadac.
" We have got a year of something like 2,880 days."

" I shouldn't think it would be an easy matter to find saints enough for such a calendar as that ! " said Ben Zoof.

Servadac laughed, and remarked that they should have the Professor talking about the 238th of June, and the 325th of December.

It soon became evident that the detached portion was not revolving round the comet, but was gradually retreating into space. Whether it had carried with it any portion of atmosphere, whether it possessed any other condition for supporting life, and whether it was likely ever again to approach to the earth, were all questions that there were no means of determining. For themselves the all-important problem was—what effect would the rending asunder of the comet have upon its rate of progress? and as they were already conscious of a further increase of muscular power, and a fresh diminution of specific gravity, Servadac and his associates could not but wonder whether the alteration in the mass of the comet would not result in its missing the expected coincidence with the earth altogether.

Although he professed himself incompetent to pronounce a decided opinion, Lieutenant Procope manifestly inclined to the belief that no alteration would ensue in the rate of Gallia's velocity; but Rosette, no doubt, could answer the question directly, and the time had now arrived in which he must be compelled to divulge the precise moment of collision.

But the Professor was in the worst of tempers. Generally taciturn and morose, he was more than usually uncivil whenever any one ventured to speak to him. The loss of his telescope had doubtless a great deal to do with his ill-humour; but the Captain drew the most favourable conclusions from Rosette's continued irritation. Had the comet been in any way projected from its course, so as to be likely to fail in coming into contact with the earth, the professor would have been quite unable to conceal his satisfaction. But they required to know more than the general truth, and felt that they had no time to lose in getting at the exact details.

The opportunity that was wanted soon came.

On the 18th, Rosette was overheard in furious altercation with Ben Zoof. The orderly had been taunting the

astronomer with the mutilation of his little comet. A fine thing, he said, to split in two like a child's toy. It had cracked like a dry nut ; and mightn't one as well live upon an exploding bomb ?—with much more to the same effect. The Professor, by way of retaliation, had commenced sneering at the “prodigious” mountain of Montmartre, and the dispute was beginning to look serious when Servadac entered.

Thinking he could turn the wrangling to some good account, so as to arrive at the information he was so anxiously seeking, the Captain pretended to espouse the views of his orderly ; he consequently brought upon himself the full force of the Professor's wrath.

Rosette's language became more and more violent, till Servadac, feigning to be provoked beyond endurance, cried :

“ You forget, sir, that you are addressing the Governour-General of Gallia.”

“ Governour-General ! humbug ! ” roared Rosette. “ Gallia is my comet ! ”

“ I deny it,” said Servadac. “ Gallia has lost its chance of getting back to the earth. Gallia has nothing to do with you. Gallia is mine ; and you must submit to the government which I please to ordain.”

“ And who told you that Gallia is not going back to the earth ? ” asked the Professor, with a look of withering scorn.

“ Why, isn't her mass diminished ? Isn't she split in half ? Isn't her velocity all altered ? ” demanded the Captain.

“ And pray who told you this ? ” again said the Professor with a sneer.

“ Everybody. Everybody knows it, of course,” replied Servadac.

“ Everybody is very clever. And you always were a very clever scholar too. We remember that of old, don't we ? ”

"Sir !"

"You nearly mastered the first elements of science, didn't you ?"

"Sir !"

"A credit to your class !"

"Hold your tongue, sir !" bellowed the Captain again, as if his anger was uncontrollable.

"Not I," said the Professor.

"Hold your tongue !" repeated Servadac.

"Just because the mass is altered you think the velocity is altered ?"

"Hold your tongue !" cried the Captain, louder than ever.

"What has mass to do with the orbit ? Of how many comets do you know the mass, and yet you know their movements ? Ignorance !" shouted Rosette.

"Insolence !" retorted Servadac.

Ben Zoof, really thinking that his master was angry, made a threatening movement towards the Professor.

"Touch me if you dare !" screamed Rosette, drawing himself up to the fullest height his diminutive figure would allow. "You shall answer for your conduct before a court of justice !"

"Where ? On Gallia ?" asked the Captain.

"No ; on the earth."

"The earth ! Pshaw ! You know we shall never get there ; our velocity is changed."

"On the earth," repeated the Professor, with decision.

"Trash !" cried Ben Zoof. "The earth will be too far off !"

"Not too far off for us to come across her orbit at 42 minutes and 35.6 seconds past two o'clock on the morning of this coming 1st of January."

"Thanks, my dear Professor—many thanks. You have given me all the information I required" ; and, with a low bow and a gracious smile, the Captain withdrew. The orderly made an equally polite bow, and followed his

master. The Professor, completely nonplussed, was left alone.

Thirteen days, then—twenty-six of the original Gallian days, fifty-two of the present—was all the time for preparation that now remained. Every preliminary arrangement was hurried on with the greatest earnestness.

There was a general eagerness to be quit of Gallia. Indifferent to the dangers that must necessarily attend a balloon ascent under such unparalleled circumstances, and heedless of Lieutenant Procope's warning that the slightest check in their progress would result in instantaneous combustion, they all seemed to conclude that it must be the simplest thing possible to glide from one atmosphere to another, so that they were quite sanguine as to the successful issue of their enterprise. Captain Servadac made a point of showing himself quite enthusiastic in his anticipations, and to Ben Zoof the going up in a balloon was the supreme height of his ambition. The Count and the Lieutenant, of colder and less demonstrative temperament, alike seemed to realise the possible perils of the undertaking, but even they were determined to put a bold face upon every difficulty.

The sea had now become navigable, and three voyages were made to Gourbi Island in the steam launch, consuming the last of their little reserve of coal.

The first voyage had been made by Servadac with several of the sailors. They found the gourbi and the adjacent buildings quite uninjured by the severity of the winter ; numbers of little rivulets intersected the pastureland ; new plants were springing up under the influence of the equatorial sun, and the luxuriant foliage was tenanted by the birds which had flown back from the volcano. Summer had almost abruptly succeeded to winter, and the days, though only three hours long, were intensely hot.

Another of the voyages to the island had been to collect the dry grass and straw which was necessary for inflating the balloon. Had the balloon been less cumbersome it

would have been conveyed to the island, whence the start would have been effected ; but as it was, it was more convenient to bring the combustible material to the balloon.

The last of the coal having been consumed, the fragments of the shipwrecked vessels had to be used day by day for fuel. Hakkabut began making a great hubbub when he found that they were burning some of the spars of the *Hansa* ; but he was effectually silenced by Ben Zoof who told him that if he made any more fuss, he should be compelled to pay 50,000 francs for a balloon-ticket, or else he should be left behind.

By Christmas Day everything was in readiness for immediate departure. The festival was observed with a solemnity still more marked than the anniversary of the preceding year. Everyone looked forward to spending New Year's Day in another sphere altogether, and Ben Zoof had already promised Pablo and Nina all sorts of New Year's gifts.

It may seem strange, but the nearer the critical moment approached, the less Hector Servadac and Count Timascheff had to say to each other on the subject. Their mutual reserve became more apparent ; the experiences of the last two years were fading from their minds like a dream ; and the fair image that had been the cause of their original rivalry was ever rising, as a vision, between them.

The Captain's thoughts began to turn to his unfinished rondo ; in his leisure moments, rhymes suitable and unsuitable, possible and impossible, were perpetually jingling in his imagination. He laboured under the conviction that he had a work of genius to complete. A poet he had left the earth, and a poet he must return.

Count Timascheff's desire to return to the world was quite equalled by Lieutenant Procopé's. The Russian sailors' only thought was to follow their master, wherever he went. The Spaniards, though they would have been unconcerned to know that they were to remain upon

Gallia, were nevertheless looking forward with some degree of pleasure to revisiting the plains of Andalusia ; and Nina and Pablo were only too delighted at the prospect of accompanying their kind protectors on any fresh excursion whatever.

The only malcontent was Palmyrin Rosette. Day and night he persevered in his astronomical pursuits, declared his intention of never abandoning his comet, and swore positively that nothing should induce him to set foot in the car of the balloon.

The misfortune that had befallen his telescope was a never-ending theme of complaint ; and just now, when Gallia was entering the narrow zone of shooting-stars, and new discoveries might have been within his reach, his loss made him more inconsolable than ever. In sheer desperation he endeavoured to increase the intensity of his vision by applying to his eyes some belladonna which he found in the *Dobryna's* medicine chest ; with heroic fortitude he endured the tortures of the experiment, and gazed up into the sky until he was nearly blind. But all in vain : not a single fresh discovery rewarded his sufferings.

No one was quite exempt from the feverish excitement which prevailed during the last days of December. Lieutenant Procope superintended his final arrangements. The two low masts of the schooner had been erected firmly on the shore, and formed supports for the montgolfier, which had been duly covered with the netting, and was ready at any moment to be inflated. The car was close at hand. Some inflated skins had been attached to its sides, so that the balloon might float for a time, in the event of its descending in the sea at a short distance from the shore. If unfortunately, it should come down in mid-ocean, nothing but the happy chance of some passing vessel could save them all from the certain fate of being drowned.

The 31st came. Twenty-four hours hence and the balloon, with its large living freight, would be high in the air. The atmosphere was less buoyant than that of the

earth, but no difficulty in ascending was to be apprehended.

Gallia was now within 96,000,000 miles of the sun, consequently not much more than 4,000,000 miles from the earth ; and this interval was being diminished at the rate of nearly 208,000 miles an hour, the speed of the earth being about 70,000 miles, that of the comet being little less than 138,000 miles an hour.

It was determined to make the start at two o'clock, three-quarters of an hour, or, to speak correctly, 42 mins. 35.6 secs., before the time predicted by the Professor as the instant of collision. The modified rotation of the comet caused it to be daylight at the time ; it would also necessarily be daylight on that side of the earth upon which the contact must take place.

An hour previously the balloon was inflated with perfect success, and the car was securely attached to the network. It only awaited the stowage of the passengers.

Isaac Hakkabut was the first to take his place in the car. But scarcely had he done so, when Servadac noticed that his waist was encompassed by an enormous girdle, that bulged out to a very extraordinary extent.

"What's all this, Hakkabut ?" he asked.

"It's only my little bit of money, your Excellency ; my modest little fortune—a mere bagatelle," said the Jew.

"And what may your little fortune weigh ?" inquired the Captain.

"Only about sixty-six pounds !" said Isaac.

"Sixty-six pounds !" cried Servadac. "We haven't reckoned for this."

"Merciful heavens !" began the Jew.

"Sixty-six pounds !" repeated Servadac. "We can hardly carry ourselves ; we can't have any dead weight here. Pitch it out, man, pitch it out !"

"God of Israel !" whined Hakkabut.

"Out with it, I say !" cried Servadac.

"What, all my money, which I have saved so long, and toiled for so hard ?"

"It can't be helped," said the Captain, unmoved.

"Oh, your Excellency!" cried the Jew.

"Now, old Nicodemus, listen to me," interposed Ben Zoof; "you just get rid of that pouch of yours, or we will get rid of you. Take your choice. Quick, quick! or out you go!"

The avaricious old man was found to value his life above his money; he made a lamentable outcry about it, but he unfastened his girdle at last, and put it out of the car.

Very different was the case with Palmyrin Rosette. He avowed over and over again his intention of never quitting the nucleus of his comet. Why should he trust himself to a balloon, that would blaze up like a piece of paper? Why should he leave the comet? Why should he not go once again upon its surface into the far-off realms of space?

His volubility was brought to a sudden check by Servadac's bidding two of the sailors, without more ado, to take him in their arms and put him quietly down at the bottom of the car.

To the great regret of their owners, the two horses and Nina's pet goat were obliged to be left behind. The only creature for which there was found a place was the carrier pigeon that had brought the Professor's message to the Hive. Servadac thought it might probably be of service in carrying some communication to the earth.

When every one, except the Captain and his orderly, had taken their places, Servadac said:

"Get in, Ben Zoof."

"After you, sir," said Ben Zoof, respectfully.

"No, no!" insisted Servadac; "the Captain must be the last to leave the ship!"

A moment's hesitation and the orderly clambered over the side of the car. Servadac followed. The cords were cut. The balloon rose with stately calmness into the air.

CHAPTER XIX

SUSPENSE

When the balloon had reached an elevation of about 2,500 yards, Lieutenant Procope determined to maintain it at that level. A wire-work stove, suspended below the casing, and filled with lighted hay, served to keep the air in the interior at a proper temperature.

After a while, the aeronauts began to survey everything above them, around them, and below them.

Beneath their feet was extended the basin of the Gallian Sea. An inconsiderable speck to the north marked the site of Gourbi Island. Ceuta and Gibraltar, which might have been expected in the west, had utterly disappeared. On the south rose the volcano, the extremity of the promontory that jutted out from the Continent that formed the framework of the sea ; whilst in every direction the strange soil, with its commixture of tellurium and gold, gleamed under the sun's rays with a perpetual iridescence.

Apparently rising with them in their ascent, the horizon was well-defined. The sky above them was perfectly clear ; but away in the north-west, in opposition to the sun, floated a new sphere, so small that it could not be an asteroid, but like a dim meteor. It was the fragment that the internal convulsion had rent from the surface of the comet, and which was now many thousands of leagues away, pursuing the new orbit into which it had been projected. During the hours of daylight it was far from distinct, but after nightfall it would assume a definite lustre.

The object, however, of supreme interest was the great expanse of the terrestrial disc, which was rapidly drawing down obliquely towards them. It totally eclipsed an enormous portion of the firmament above, and approaching with an ever-increasing velocity, was now within half its average distance from the moon. So close was it, that the two poles could not be embraced in one focus. Irregular

patches of greater or less brilliancy alternated on its surface, the brighter betokening the continents, the more sombre indicating the oceans that absorbed the solar rays. Above, there were broad white bands, darkened on the side averted from the sun, exhibiting a slow but unintermittent movement; these were the vapours that pervaded the terrestrial atmosphere.

But as the aeronauts were being hurried on at a speed of 70 miles a second, this vague aspect of the earth soon developed itself into definite outlines. Mountains and plains were no longer confused, the distinction between sea and shore was more plainly identified, and instead of being, as it were, depicted on a map, the surface of the earth appeared as though modelled in relief.

Twenty-seven minutes past two, and Gallia is only 72,000 miles from the terrestrial sphere; quicker and quicker is the velocity; ten minutes later, and they are only 36,000 miles apart!

The whole configuration of the earth is clear.

"Europe! Russia! France!" shout Procope, the Count, and Servadac, almost in a breath.

And they are not mistaken. The eastern hemisphere lies before them in the full blaze of light, and there is no possibility of error in distinguishing continent from continent.

The surprise only kindled their emotion to yet keener intensity, and it would be hard to describe the excitement with which they gazed at the panorama that was before them. The crisis of peril was close at hand, but imagination overleaped all consideration of danger; and everything was absorbed in the one idea that they were again within reach of that circle of humanity from which they had supposed themselves severed for ever.

And, truly, if they could have paused to study it, that panorama of the states of Europe which was outstretched before their eyes was conspicuous for the fantastic resemblances with which Nature on the one hand, and international relations on the other, have associated them.

There was England, marching like some stately dame towards the east, trailing her ample skirts and coroneted with the cluster of her little islets ; Sweden and Norway, with their bristling spine of mountains, seemed like a splendid lion eager to spring down from the bosom of the ice-bound north ; Russia, a gigantic polar bear, stood with its head towards Asia, its left paw resting upon Turkey, its right upon Mount Caucasus ; Austria resembled a huge cat curled up and sleeping a watchful sleep ; Spain, with Portugal as a pennant, like an unfurled banner, floated from the extremity of the continent ; Turkey, like an insolent cock, appeared to clutch the shores of Asia with the one claw, and the land of Greece with the other ; Italy, as it were a foot and leg encased in a tight-fitting boot, was juggling deftly with the islands of Sicily, Sardinia, and Corsica ; Prussia, a formidable hatchet imbedded in the heart of Germany, its edge just grazing the frontiers of France ; whilst France itself suggested a vigorous torso with Paris at its breast.

All at once Ben Zoof breaks the silence :

“ Montmartre ! I see Montmartre ! ”

And, smile at the absurdity as others might, nothing could induce the worthy orderly to surrender his belief that he could actually make out the features of his beloved home.

The only individual whose soul seemed unstirred by the approaching earth was Palmyrin Rosette. Leaning over the side of the car, he kept his eyes fixed upon the abandoned comet, now floating about a mile and a half below him, bright in the general irradiation which was flooding the surrounding space.

Chronometer in hand, Lieutenant Procope stood marking the minutes and seconds as they fled ; and the stillness which had once again fallen upon them all was only broken by his order to replenish the stove, that the montgolfier might retain its necessary level. Servadac and the Count continued to gaze upon the earth with an eagerness that almost amounted to awe. The balloon was slightly in the

rear of Gallia, a circumstance that augured somewhat favourably, because it might be presumed that if the comet preceded the balloon in its contact with the earth, there would be a break in the suddenness of transfer from one atmosphere to the other.

The next question of anxiety was, where would the balloon alight? If upon *terra firma*, would it be in a place where adequate resources for safety would be at hand? If upon the ocean, would any passing vessel be within hail to rescue them from their critical position? Truly, as the Count observed to his comrades, none but a Divine Pilot could steer them now.

"Forty-two minutes past!" said the Lieutenant, and his voice seemed to thrill through the silence of expectation.

There were not 20,000 miles between the comet and the earth!

The calculated time of impact was 2 hrs., 47 mins., 35.6 secs. Five minutes more and collision must ensue!

But was it so? Just at this moment, Lieutenant Procope observed that the comet deviated sensibly in an oblique course.

Was it possible that after all collision would not occur?

The deviation, however, was not great; it did not justify any anticipation that Gallia would merely graze the earth, as it had done before; it left it certain that the two bodies would inevitably impinge.

"No doubt," said Ben Zoof, "this time we shall stick together."

Another thought occurred. Was it not only too likely that, in the fusion of the two atmospheres, the balloon itself, in which they were being conveyed, would be rent into ribbons, and every one of its passengers hurled into destruction, so that not a Gallian should survive to tell the tale of their strange peregrinations?

Moments were precious; but Hector Servadac resolved that he would adopt a device to secure that at least some record of their excursion in solar distances should survive themselves.

Tearing a leaf from his note-book, he wrote down the name of the comet, the list of the fragments of the earth it had carried off, the names of his companions, and the date of the comet's aphelion ; and having subscribed it with his signature, turned to Nina and told her he must have the carrier-pigeon which was nestling in her bosom.

The child's eyes filled with tears ; she did not say a word, but imprinting a kiss upon its soft plumage, she surrendered it at once, and the message was hurriedly fastened to its neck. The bird wheeled round and round in a few circles that widened in their diameter, and quickly sank to an altitude in the comet's atmosphere much inferior to the balloon.

Some minutes more were thus consumed, and the interval of distance was reduced to less than 8,000 miles.

The velocity became inconceivably great, but the increased rate of motion was in no way perceptible ; there was nothing to disturb the equilibrium of the car in which they were making their aërial adventure.

"Forty-six minutes !" announced the Lieutenant.

The glowing expanse of the earth's disc seemed like a vast funnel, yawning to receive the comet and its atmosphere, balloon and all, into its open mouth.

"Forty-seven !" cried Procope.

There was half a minute yet. A thrill ran through every vein. A vibration quivered through the atmosphere. The montgolfier, elongated to its utmost stretch, was manifestly being sucked into a vortex. Every passenger in the quivering car involuntarily clung spasmodically to its sides, and as the two atmospheres amalgamated, clouds accumulated in heavy masses, involving all around in dense obscurity, while flashes of lurid flame threw a weird glimmer on the scene.

In a mystery everyone found himself upon the earth again. They could not explain it, but here they were once more upon terrestrial soil ; in a swoon they had left the earth, and in a similar swoon they had come back !

Of the balloon not a vestige remained, and contrary to

previous computation, the comet had merely grazed the earth, and was traversing the regions of space, again far away !

CHAPTER XX

BACK AGAIN

“ **I**n Algeria, Captain ? ”

“ Yes, Ben Zoof, in Algeria ; and not far from Mostaganem.”

Such were the first words which, after their return to consciousness, were exchanged between Servadac and his orderly.

They had resided so long in the province that they could not for a moment be mistaken as to their whereabouts, and although they were incapable of clearing up the mysteries that shrouded the miracle, yet they were convinced at the first glance that they had been returned to the earth at the very identical spot where they had quitted it.

In fact, they were scarcely more than a mile from Mostaganem, and in the course of an hour, when they had all recovered from the bewilderment occasioned by the shock, they started off in a body and made their way to the town.

It was a matter of extreme surprise to find no symptom of the least excitement anywhere as they went along. The population was perfectly calm ; everyone was pursuing his ordinary avocation ; the cattle were browsing quietly upon the pastures that were moist with the dew of an ordinary January morning. It was about eight o'clock ; the sun was rising in the east ; nothing could be noticed to indicate that any abnormal incident had either transpired or been expected by the inhabitants. As to a collision with a comet, there was not the faintest trace of any such phenomenon crossing men's minds, and awakening, as it surely would, a panic little short of the certified approach of the millennium.

"Nobody expects us," said Servadac ; "that is very certain."

"No, indeed," answered Ben Zoof, with a sigh ; he was manifestly disappointed that his return to Mostaganem was not welcomed with a triumphal reception.

They reached the Mascara gate. The first persons that Servadac recognised were the two friends that he had invited to be his seconds in the duel two years ago, the Colonel of the 2nd Fusiliers and the Captain of the 8th Artillery.

In return to his somewhat hesitating salutation, the Colonel greeted him heartily :

"Ah ! Servadac, old fellow ! is it you ? "

"I, myself," said the Captain.

"Where on earth have you been to all this time ? In the name of peace, what have you been doing with yourself ? "

"You would never believe me, Colonel," answered Servadac, "if I were to tell you ; so on that point I had better hold my tongue."

"Hang your mysteries ! " said the Colonel ; "tell me, where have you been ? "

"No, my friend, excuse me," replied Servadac ; "but shake hands with me in earnest, that I may be sure I am not dreaming."

Hector Servadac had made up his mind, and no amount of persuasion could induce him to divulge his incredible experiences.

Anxious to turn the subject, Servadac took the earliest opportunity of asking :

"And what about Madame de L—— ? "

"Madame de L—— ! " exclaimed the Colonel, taking the words out of his mouth ; "the lady is married long ago ; you did not suppose that she was going to wait for you. 'Out of sight, out of mind,' you know."

"True," replied Servadac ; and turning to the Count, he said :

"Do you hear that? We shall not have to fight our duel after all."

"Most happy to be excused," rejoined the Count.

The rivals took each other by the hand, and were united henceforth in the bonds of a sincere and confiding friendship.

"An immense relief," said Servadac to himself, "that I have no occasion to finish that confounded rondo!"

It was agreed between the Captain and the Count that it would be desirable in every way to maintain the most rigid silence upon the subject of the inexplicable phenomena which had come within their experience. It was to them both a subject of the greatest perplexity to find that the shores of the Mediterranean had undergone no change, but they coincided in the opinion that it was prudent to keep their bewilderment entirely to themselves. Nothing induced them to break their reserve.

The very next day the small community was broken up.

The *Dobryna's* crew, with the Count and the Lieutenant, started for Russia, and the Spaniards, provided, by the Count's liberality, with a competency that ensured them from want, were despatched to their native shores. The leave-taking was accompanied by genuine tokens of regard and goodwill.

For Isaac Hakkabut alone there was no feeling of regret. Doubly ruined by the loss of his tartan, and by the abandonment of his fortune, he disappeared entirely from the scene. It is needless to say that no one troubled himself to institute a search after him, and, as Ben Zoof sententiously remarked:

"Perhaps old Jehoram is making money in America by exhibiting himself as the latest arrival from a comet!"

But however great was the reserve which Captain Servadac might make on his part, nothing could induce Professor Rosette to conceal his experiences. In spite of the denial which astronomer after astronomer gave to the appearance of such a comet as Gallia at all, and of its being refused admission to the catalogue, he published a voluminous treatise, not only detailing his own adventures,

but setting forth, with the most elaborate precision, all the elements which settled its period and its orbit. Discussions arose in scientific circles ; an overwhelming majority decided against the representations of the Professor ; an unimportant minority declared themselves in his favour, and a pamphlet obtained some degree of notice, ridiculing the whole debate under the title of " The History of an Hypothesis." In reply to this impertinent criticism of his labours, Rosette issued a rejoinder full with the most vehement expressions of indignation, and reiterating his asseveration that a fragment of Gibraltar was still traversing the regions of space, carrying thirteen Englishmen upon its surface, and concluding by saying that it was the great disappointment of his life that he had not been taken with them.

Pablo and little Nina were adopted, the one by Servadac, the other by the Count, and under the supervision of their guardians, were well educated and cared for. Some years later, Colonel, no longer Captain, Servadac, his hair slightly streaked with grey, had the pleasure of seeing the handsome young Spaniard united in marriage to the Italian, now grown into a charming girl, upon whom the Count bestowed an ample dowry ; the young people's happiness in no way marred by the fact that they had not been destined, as once seemed likely, to be the Adam and Eve of a new world.

The career of the comet was ever a mystery which neither Servadac nor his orderly could eliminate from the regions of doubt. Anyhow, they were firmer and more confiding friends than ever.

One day, in the environs of Montmartre, where they were secure from eavesdroppers, Ben Zoof incidentally referred to the experiences in the depths of Nina's Hive ; but stopped short and said :

" However, those things never happened, sir, did they ? "

His master could only reply :

" Confound it, Ben Zoof ! What is a man to believe ? "

